PUBLIC NOTICE

Florim USA, Inc. has applied to the Tennessee Air Pollution Control Division (TAPCD) for renewal of their major source operating permit subject to the provisions of paragraph 1200-03-09-.02(11) of the Tennessee Air Pollution Control Regulations (also frequently referred to as Title V regulations). A major source (Title V) operating permit is required by both the Federal Clean Air Act and the Tennessee Air Pollution Control Regulations.

The applicant is Florim USA, Inc. with a site address of 300 International Blvd., Clarksville, TN 37041. They seek to obtain a major source operating permit for their ceramic tile manufacturing operation. However, it should be noted that this facility has a current major source operating permit.

EPA has agreed to treat this draft Part 70 permit as a proposed Part 70 permit and to perform its 45-day review provided by the law concurrently with the public notice period. If any substantive comments are received, EPA's 45-day review period will cease to be performed concurrently with the public notice period. EPA's 45-day review period will start once the public notice period has been completed and EPA receives notification from the Tennessee Air Pollution Control Division that comments have been received and resolved. Whether EPA's 45-day review period is performed concurrently with the public comment period or after the public comment period has ended, the deadline for citizen's petitions to the EPA Administrator will be determined as if EPA's 45-day review period is performed after the public comment period has ended (i.e., sequentially).

The status regarding EPA's 45-day review of this project and the deadline for submitting a citizen petition can be found at the following website address:

http://www2.epa.gov/caa-permitting/tennessee-proposed-title-v-permits

A copy of the application materials used by the TAPCD and a copy of the draft permit are available for public inspection during normal business hours at the following locations:

Clarksville-Montgomery County Public Library 350 Pageant Lane, Suite 501 Clarksville, TN 37040

and

Tennessee Department of Environment and Conservation Division of Air Pollution Control William R. Snodgrass Tennessee Tower 312 Rosa L. Parks Avenue, 15th Floor Nashville, TN 37243

Also, if you require a copy of the draft permit it is available electronically by accessing the TDEC internet site located at: http://www.tn.gov/environment/topic/ppo-air

Interested parties are invited to review these materials and comment. In addition, a public hearing may be requested at which written or oral presentations may be made. To be considered, written comments or requests for a public hearing must be made within thirty (30) days of the date of this notice and should be addressed to Ms. Michelle Walker Owenby, Director, Air Pollution Control Division, William R. Snodgrass Tennessee Tower, 312 Rosa L. Parks Avenue, 15th Floor, Nashville, TN 37243. Questions concerning the sources may be addressed to Mark Reynolds at the same address or by calling (615)-532-0554. A final determination will be made after weighing all relevant comments.

Individuals with disabilities who wish to participate in these proceedings (or to review these filings) should contact the Tennessee Department of Environment and Conservation to discuss any auxiliary aids or services needed to facilitate such participation. Such contact may be in person, by writing, telephone, or other means, and should be made no less than ten days prior to the end of the public comment period to allow time to provide such aid or services. Contact the Tennessee Department of Environment and Conservation ADA Coordinator, William R. Snodgrass Tennessee Tower, 312 Rosa L. Parks Avenue, 2nd Floor, Nashville, TN 37243, 1-866-253-5827. Hearing impaired callers may use the Tennessee Relay Service, 1-(800)-848-0298.

TITLE V PERMIT STATEMENT

Facility Name: Florim USA, Inc.

City: Clarksville

County: Montgomery

Date Application Received: March 23, 2015

Date Application Deemed Complete: March 23, 2015

Emission Source Reference No.: 63-0135

Permit No.:570069

INTRODUCTION

This narrative is being provided to assist the reader in understanding the content of the attached Title V operating permit. This Title V Permit Statement is written pursuant to Tennessee Air Pollution Control Rule 1200-03-09-.02(11)(f)1.(v). The primary purpose of the Title V operating permit is to consolidate and identify existing state and federal air requirements applicable to Florim USA, Inc. and to provide practical methods for determining compliance with these requirements. The following narrative is designed to accompany the Title V Operating Permit. It initially describes the facility receiving the permit, then the applicable requirements and their significance, and finally the compliance status with those applicable requirements. This narrative is intended only as an adjunct for the reviewer and has no legal standing. Any revisions made to the permit in response to comments received during the public participation process will be described in an addendum to this narrative.

Acronyms

PSD - Prevention of Significant Deterioration

NESHAP - National Emission Standards for Hazardous Air Pollutants

NSPS - New Source Performance Standards

MACT - Maximum Achievable Control Technology

NSR - New Source Review

CAM - Compliance Assurance Monitoring

I. Identification Information

A. Source Description

This facility manufactures ceramic tile. The renewal permit combines several sources as listed below. The facility consists of the following sources:

Source #	Description	Combined Sources
63-0135-02:	Raw Material Storage, Body Preparation, 3 Spray Dryers	02, 06, 20, 21, 22, 29
63-0135-04:	Tile Presses #1, 2, 3, 9, 10, 26, 27, 28	04, 18, 19, 33
63-0135-05:	Glaze Batching	05
63-0135-08:	Glaze Lines #1, 2, 3, 9, 10, 26, 27, 28; 8 Ink Jet Printers	08, 24, 27, 31
63-0135-09:	Tile Kilns #6, 7, 8, 9	09
63-0135-30:	Tile Kilns #1 and 22	30
63-0135-32:	Emergency RICE	32

B. Title V Permit History

- 1. The original Title V permit (#550892) was issued on June 25, 2004.
- 2. After issuance of Title V Permit No. 550892, the following changes were made:
 - a. The Division received a request for an Administrative Permit Amendment on October 21, 2004. The request was for adding minimum baghouse pressure drops and scrubber liquid flow rates.
 - b. The Division received a request for a Significant Modification on June 8, 2005. The request was for adding a roller kiln, a vertical tile dryer, two tile glazing lines, and two tile presses. Also, the request was for removing three tile kilns, four tile presses, and four tile glazing lines.
 - c. The Division received a request for a Minor Permit Modification on January 27, 2006. The request was for adding a vertical tile dryer.
 - d. Administrative Permit Amendment #1 was issued on October 3, 2006. The responsible official was changed.
 - e. Administrative Permit Amendment #2 was issued on July 2, 2007. The responsible official was changed.
 - f. The Division received a request for a Minor Permit Modification on May 11, 2009. The request was for the adding an ink jet printer (Source #63-0135-31).
 - g. The Division received a request for an Administrative Permit Amendment on December 30, 2009. The request was for a change in responsible official.
- 3. Title V renewal permit (#562538) was issued on September 20, 2010.
- 4. After issuance of Title V Permit No. 562538, the following changes were made:
 - a. Administrative Amendment #1 was issued on May 20, 2011. Deadline extension for submitting performance test results in Condition E24-13. Responsible official changed. Pressure drop limit added to Condition E24-4.
 - b. Minor Modification #1 was issued on November 15, 2011. Increase the HF limit to 0.62 lb/hr for Source #63-0135-09. Add Michael Mathys as an additional Responsible Official.
 - c. Minor Modification #2 was issued on February 1, 2012. Add one ink jet printer to Source #63-0135-31 and increase VOC limit to 25.0 ton/yr and HAP limit to 10.0 ton/yr.
 - d. Minor Modification #3 was issued on XXXX. The exhaust from Tile Presses #15 and 16 will be routed to Source #63-0135-18, instead of 63-0135-19.
 - e. Minor Modification #4 was issued on January 28, 2013. Add Press Loading Operation (63-0135-33). Add Tile Presses #26, 27, 28 (63-0135-19) and remove Tile Presses #14-18. Add Glaze Lines #26, 27, 28 (63-0135-27) and remove Glaze Lines #15-18. Add five Ink Jet Printers (63-0135-31). Add RICE engine (63-0135-32)
 - f. Minor Modification #5 was issued on September 16, 2013. Remove the operating hours limitations in conditions E14-3 and E18-3.
 - g. Administrative Amendment #2 was issued on January 9, 2014. Change in Responsible Official.
 - h. Administrative Amendment #3 was issued on February 19, 2014. Add the following pressure drop values (2.2, 1.8, and 1.6) to Conditions E13-1, E16-1, and E22-1, successively.
 - i. Significant Modification #1 was issued on September 30, 2014.
 - (1) Fees changed so Condition E1 was modified. Reporting changed so Condition E2 was modified.
 - (2) Florim agreed to HAP limits below the major source thresholds of 10 TPY for a single HAP and 25 TPY for a combination of HAP's so the facility is not subject to 40 CFR 63, subpart KKKKK (major source NESHAP for clay ceramics manufacturing). By becoming an area source for HAP's, the facility is now subject to 40 CFR 63, subpart RRRRRR (area source NESHAP for clay ceramics manufacturing). Conditions E3-8(SM1) through E3-18(SM1) were added to include the applicable requirements from the area source NESHAP.

- (3) For Sources 63-0135-09 and 63-0135-30, HCl limits were reduced and sorbent flow rate and baghouse pressure drop limits were set based on stack testing, and CO limits were reduced. Conditions E24-4, E24-5, E24-8, E24-9, E24-10, E24-14, E25-5, E25-6, E25-9, E25-10, E25-11, and E25-16 were modified. Condition E24-13 was deleted since it required a stack test that had already been completed.
- (4) For Source 63-0135-24, the control device was changed from a wet scrubber to a baghouse. The parameter being recorded changed from scrubber flow rate to baghouse pressure drop. Condition E20-1 was modified and condition E20-3 was deleted.
- j. Minor Modification #6 was issued on October 27, 2014.
 - (1) For Source 63-0135-08, a new baghouse is being installed. Conditions E18-1 and E18-2 were modified.
 - (2) For Source 63-0135-04, the emissions from the press loading operation are being rerouted to an existing baghouse (formerly controlling 63-0135-08). Condition E14-1 was modified.
 - (3) Conditions E1 and E2 were also modified. Condition E3-20 was added.
- k. Minor Modification #7 was issued on April 8, 2015. For Source 63-0135-30, addition of Kiln #22. Conditions E25-1, E25-2, E25-4, E25-5, E25-6, E25-7, E25-8, E25-9, E25-10, E25-11, E25-12, E25-13, and E25-15 were modified. Condition E25-17 was added. For Source 63-0135-09, HCl limit was lowered. Condition E24-10 is new. Conditions E1 and E2 were also modified.
- 1. Minor Modification #8 was issued on October 30, 2015.
 - (1) For Source 63-0135-09 and 63-0135-30, addition of requirements for pilot testing of new sorbent and/or sorbent feed rates for kilns. Conditions E24-15 and E25-18 were added.
 - (2) For Source 63-0135-29, addition of a new conveyor system with baghouse. Condition E5-2 was modified, and Condition E5-3 was added.
 - (3) For Source 63-0135-02, removal of all equipment except conveyor system. Source description was changed.
 - (4) For Source 63-0135-20, addition of one ball mill and removal of three old ball mills. Source description was changed.
 - (5) E2 was also modified.

C. Facility Classification

1. Attainment or Non-Attainment Area Location

Area is designated as an attainment area for all criteria pollutants.

2. Company is located in a Class II area).

D. Regulatory Status

1. PSD/NSR

This facility is not a major source under PSD.

2. Title V Major Source Status by Pollutant

Pollutant	Is the pollutant	Major Source	Non-Major
	emitted?	Status	Source Status
PM	YES	YES	NO
PM_{10}	YES	YES	NO
SO_2	YES	YES	NO
VOC	YES	YES	NO
NO_X	YES	YES	NO
CO	YES	YES	NO
Individual HAP	YES	NO	YES
Total HAPs	YES	NO	YES
GHG	YES	YES	NO

3. MACT Standards

This facility *is not* a major source for HAPs. This facility *is* subject to 40 CFR 63, Subpart RRRRRR, which is the NESHAP for Clay Ceramics Manufacturing Area Sources. The engines are subject to 40 CFR 63, Subpart ZZZZ, which is the NESHAP for Stationary Reciprocating Internal Combustion Engines.

4. Program Applicability

Are the following programs applicable to the facility? PSD (no, the facility has never undergone PSD review) NESHAP (yes) NSPS (yes)

II. Compliance Information

A. Compliance Status

Is the facility currently in compliance with all applicable requirements? *yes*Are there any applicable requirements that will become effective during the permit term? *no*

III. Other Requirements

A. Emissions Trading

The facility is not involved in an emission trading program.

B. Acid Rain Requirements

This facility is not subject to any requirements in Title IV of the Clean Air Act.

C. Prevention of Accidental Releases

Not Applicable

D. Compliance Assurance Monitoring (CAM)

This facility is subject to CAM

IV. Public Participation Procedures

Notification of this draft permit was mailed to the following environmental agencies:

- 1. U.S. EPA Region IV
- 2. State of Kentucky, Division of Air Quality
- 3. Davidson County Metropolitan Health Department

TENNESSEE AIR POLLUTION CONTROL BOARD DEPARTMENT OF ENVIRONMENT AND CONSERVATION NASHVILLE, TENNESSEE 37243



OPERATING PERMIT (TITLE V) Issued Pursuant to Tennessee Air Quality Act

This permit fulfills the requirements of Title V of the Federal Clean Air Act (42 U.S.C. 7661a-7661e) and the federal regulations promulgated thereunder at 40 CFR Part 70. (FR Vol. 57, No. 140, Tuesday, July 21, 1992 p.32295-32312). This permit is issued in accordance with the provisions of paragraph 1200-03-09-.02(11) of the Tennessee Air Pollution Control Regulations. The permittee has been granted permission to operate an air contaminant source in accordance with emissions limitations and monitoring requirements set forth herein.

Date Issued: DRAFT Permit Number:

570069

Date Expires: DRAFT

Issued To:Florim USA, Inc.

Installation Address:
300 International Blvd.

300 International Blvd. Clarksville, TN 37041

Installation Description:

Manufacturing of Ceramic Tile

Listing of Sources in Table of Contents-Section E

Emission Source Reference No.: 63-0135

Renewal Application Due Date: Primary SIC: 32

Between XXXX and XXXX

Information Relied Upon:

Title V Renewal application dated March 23, 2015

Minor Modification applications dated February 1, 2016 and February 26, 2016

TECHNICAL	SECRETARY	

No Authority is Granted by this Permit to Operate, Construct, or Maintain any Installation in Violation of any Law, Statute, Code, Ordinance, Rule, or Regulation of the State of Tennessee or any of its Political Subdivisions.

POST AT INSTALLATION ADDRESS

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ATTACHMENT 1 Opacity Matrix Decision Trees for Visible Emission

Evaluation

Methods 2

1 page

ATTACHMENT 2 Opacity Matrix Decision Trees for Visible Emission

Evaluation

Methods Method 9

1 page

SECTION A

GENERAL PERMIT CONDITIONS

A permit issued under the provisions of paragraph 1200-03-09-.02(11) is a permit issued pursuant to the requirements of Title V of the Federal Act and its implementing Federal regulations promulgated at 40 CFR, Part 70.

A1. <u>Definitions.</u> Terms not otherwise defined in the permit shall have the meaning assigned to such terms in the referenced regulation.

TAPCR 1200-03

A2. Compliance requirement. All terms and conditions in a permit issued pursuant to paragraph 1200-03-09-.02(11) including any provisions designed to limit a source's potential to emit, are enforceable by the Administrator and citizens under the Federal Act. The permittee shall comply with all conditions of its permit. Except for requirements specifically designated herein as not being federally enforceable (State Only), non-compliance with the permit requirements is a violation of the Federal Act and the Tennessee Air Quality Act and is grounds for enforcement action; for a permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. Non-compliance with permit conditions specifically designated herein as not being federally enforceable (State Only) is a violation of the Tennessee Air Quality Act and may be grounds for these actions.

TAPCR 1200-03-09-.02(11)(e)2(i) and 1200-03-09-.02(11)(e)1(vi)(I)

A3. Need to halt or reduce activity. The need to halt or reduce activity is not a defense for noncompliance. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit. However, nothing in this item shall be construed as precluding consideration of a need to halt or reduce activity as a mitigating factor in assessing penalties for noncompliance if the health, safety or environmental impacts of halting or reducing operations would be more serious than the impacts of continuing operations.

TAPCR 1200-03-09-.02(11)(e)1(vi)(II)

A4. The permit. The permit may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.

TAPCR 1200-03-09-.02(11)(e)1(vi)(III)

A5. Property rights. The permit does not convey any property rights of any sort, or any exclusive privilege.

TAPCR 1200-03-09-.02(11)(e)1(vi)(IV)

A6. <u>Submittal of requested information.</u> The permittee shall furnish to the Technical Secretary, within a reasonable time, any information that the Technical Secretary may request in writing to determine whether cause exists for modifying, revoking and reissuing, or termination of the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Technical Secretary copies of records required to be kept by the permit. If the permittee claims that such information is confidential, the Technical Secretary may review that claim and hold the information in protected status until such time that the Board can hear any contested proceedings regarding confidentiality disputes. If the information is desired by EPA, the permittee may mail the information directly to EPA. Any claims of confidentiality for federal purposes will be determined by EPA.

TAPCR 1200-03-09-.02(11)(e)1(vi)(V)

A7. Severability clause. The requirements of this permit are severable. A dispute regarding one or more requirements of this permit does not invalidate or otherwise excuse the permittee from their duty to comply with the remaining portion of the permit.

TAPCR 1200-03-09.02(11)(e)1(v)

A8. Fee payment.

- (a) The permittee shall pay an annual major source emission fee based upon the responsible official's choice of actual emissions or allowable emissions. An emission cap of 4,000 tons per year per regulated pollutant per major source SIC Code shall apply to actual or allowable based emission fees. A major source annual emission fee will not be charged for emissions in excess of the cap (s) or for carbon monoxide.
- (b) Major sources who have filed a timely, complete operating permit application in accordance with 1200-03-09-.02(11), shall pay allowable emission based fees until the beginning of the next annual accounting period following receipt of their major source operating permit. At that time, the permittee shall begin paying their annual emission fee based upon their choice of actual or allowable based fees, or mixed actual and allowable based fees as stated under SECTION E of this permit. Once permitted, altering the existing choice shall be accomplished by a written request of the major source, filed in the office of the Technical Secretary at least one hundred eighty days prior to the expiration or reissuance of the major source operating permit.
- (c) Major sources must conform to the following requirements with respect to fee payments:
 - 1. If a major source choosing an allowable based annual emission fee wishes to restructure its allowable emissions for the purposes of lowering its annual emission fees, a mutually agreed upon, more restrictive regulatory requirement may be established to minimize the allowable emissions and thus the annual emission fee. The more restrictive requirement must be specified on the permit, and must include the method used to determine compliance with the limitation. The documentation procedure to be followed by the major source must also be included to insure that the limit is not exceeded. Restructuring the allowable emissions is permissible only in the annual accounting periods of eligibility and only, if the written request for restructuring is filed with the Technical Secretary at least 120 days prior to the beginning of the annual accounting period of eligibility. These periods of eligibility occur upon expiration of the initial major source operating permit, renewal of an expired major source operating permit or reissuance of a major source operating permit.
 - 2. Major sources paying on allowable based emission fees will be billed by the Division no later than April 1 prior to the end of the accounting period. The major source annual emission fee is due July 1 following the end of the accounting period.
 - **3.** Major sources choosing an actual based annual emission fee shall file an actual emissions analysis with the Technical Secretary which summarizes the actual emissions of all regulated pollutants at the air contaminant sources of their facility. Based upon the actual emissions analysis, the source shall calculate the fee due and submit the payment and the analysis each July 1st following the end of the annual accounting period.
 - 4. Major sources choosing a mixture of allowable and actual based emission fees shall file an actual emissions and allowable emissions analysis with the Technical Secretary which summarizes the actual and allowable emissions of all regulated pollutants at the air contaminant sources of their facility. Based upon the analysis, the source shall calculate the fee due and submit the payment and the analysis each July 1st following the end of the annual accounting period.

The mixed based fee shall be calculated utilizing the 4,000 ton cap specified in subparagraph 1200-03-26.02(2)(i). In determining the tonnages to be applied toward the regulated pollutant 4,000 ton cap in a mixed based fee, the source shall first calculate the actual emission based fees for a regulated pollutant and apply that tonnage toward the regulated pollutant's cap. The remaining tonnage available in the 4,000 ton category of a regulated pollutant shall be subject to allowable emission based fee calculations for the sources that were not included in the actual emission based fee calculations. Once the 4,000 ton cap has been reached for a regulated pollutant, no additional fee shall be required.

5. Major sources choosing to pay their major source annual emission fee based on actual based emissions or a mixture of allowable and actual based emissions may request an extension of time to file their emissions analysis with the Technical Secretary. The extension may be granted by the Technical Secretary up to ninety (90) days. The request for extension must be postmarked no later than July 1 or the request for extension shall be denied. The request for extension to file must state the reason and give an adequate explanation.

An estimated annual emission fee payment of no less than eighty percent (80%) of the fee due July 1 must accompany the request for extension to avoid penalties and interest on the underpayment of the annual emission fee. A remaining balance due must accompany the emission analysis. If there has been an overpayment, a refund may be requested in writing to the Division or be applied as a credit toward next year's major source annual emission fee. The request for extension of time is not available to major sources choosing to pay their major source annual emission fee based on allowable emissions.

- 6. Newly constructed major sources or minor existing sources modifying their operations such that they become a major source in the midst of the standard July 1st to June 30th annual accounting period, shall pay allowable based annual emission fees for the fractional remainder of the annual accounting period commencing upon their start-up. At the beginning of the next annual accounting period, the "responsible official" of the source may choose to pay annual emission fees based on actual or allowable emissions or a mixture of the two as provided for in this rule 1200-03-26-.02.
- (d) Where more than one (1) allowable emission limit is applicable to a regulated pollutant, the allowable emissions for the regulated pollutants shall not be double counted. Major sources subject to the provisions of paragraph 1200-03-26-.02(9) shall apportion their emissions as follows to ensure that their fees are not double counted.
 - 1. Sources that are subject to federally promulgated hazardous air pollutant standards that can be imposed under Chapter 1200-03-11 or Chapter 1200-03-31 will place such regulated emissions in the specific hazardous air pollutant under regulation. If the pollutant is also in the family of volatile organic compounds or the family of particulates, the pollutant shall not be placed in that respective family category.
 - 2. A miscellaneous category of hazardous air pollutants shall be used for hazardous air pollutants listed at part 1200-03-26-.02(2)(i)12 that do not have an allowable emission standard. A pollutant placed in this category shall not be subject to being placed in any other category such as volatile organic compounds or particulates.
 - **3.** Each individual hazardous air pollutant and the miscellaneous category of hazardous air pollutants is subject to the 4,000 ton cap provisions of subparagraph 1200-03-26-.02(2)(i).
 - 4. Major sources that wish to pay annual emission fees for PM_{10} on an allowable emission basis may do so if they have a specific PM_{10} allowable emission standard. If a major source has a total particulate emission standard, but wishes to pay annual emission fees on an actual PM_{10} emission basis, it may do so if the PM_{10} actual emission levels are proven to the satisfaction of the Technical Secretary. The method to demonstrate the actual PM_{10} emission levels must be made as part of the source's major source operating permit in advance in order to exercise this option. The PM_{10} emissions reported under these options shall not be subject to fees under the family of particulate emissions. The 4,000 ton cap provisions of subparagraph 1200-03-26-.02(2)(i) shall also apply to PM_{10} emissions.

TAPCR 1200-03-26-.02 (3) and (9) and 1200-03-09-.02(11)(e)1(vii)

A9. Permit revision not required. A permit revision will not be required under any approved economic incentives, marketable permits, emissions trading and other similar programs or process for changes that are provided for in the permit.

TAPCR 1200-03-09-.02(11)(e)1(viii)

- **A10.** <u>Inspection and entry.</u> Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Technical Secretary or his authorized representative to perform the following for the purposes of determining compliance with the permit applicable requirements:
 - (a) Enter upon, at reasonable times, the permittee's premises where a source is located or emissions-related activity is conducted, or where records must be kept under the conditions of the permit;
 - (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;
 - (c) Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
 - (d) As authorized by the Clean Air Act and Chapter 1200-03-10 of TAPCR, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.
 - (e) "Reasonable times" shall be considered to be customary business hours unless reasonable cause exists to suspect noncompliance with the Act, Division 1200-03 or any permit issued pursuant thereto and the Technical Secretary specifically authorizes an inspector to inspect a facility at any other time.

TAPCR 1200-03-09-.02(11)(e)3.(ii)

A11. Permit shield.

- (a) Compliance with the conditions of this permit shall be deemed compliance with all applicable requirements as of the date of permit issuance, provided that:
 - 1. Such applicable requirements are included and are specifically identified in the permit; or

2. The Technical Secretary, in acting on the permit application or revision, determines in writing that other requirements specifically identified are not applicable to the source, and the permit includes the determination or a concise summary thereof.

- **(b)** Nothing in this permit shall alter or affect the following:
 - 1. The provisions of section 303 of the Federal Act (emergency orders), including the authority of the Administrator under that section. Similarly, the provisions of T.C.A. §68-201-109 (emergency orders) including the authority of the Governor under the section;
 - **2.** The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
 - 3. The applicable requirements of the acid rain program, consistent with section 408(a) of the Federal Act; or
 - **4.** The ability of EPA to obtain information from a source pursuant to section 114 of the Federal Act.
- (c) Permit shield is granted to the permittee.

TAPCR 1200-03-09-.02(11)(e)6

A12. Permit renewal and expiration.

- (a) An application for permit renewal must be submitted at least 180 days, but no more than 270 days prior to the expiration of this permit. Permit expiration terminates the source's right to operate unless a timely and complete renewal application has been submitted.
- (b) Provided that the permittee submits a timely and complete application for permit renewal the source will not be considered to be operating without a permit until the Technical Secretary takes final action on the permit application, except as otherwise noted in paragraph 1200-03-09-.02(11).
- (c) This permit, its shield provided in Condition A11, and its conditions will be extended and effective after its expiration date provided that the source has submitted a timely, complete renewal application to the Technical Secretary.

TAPCR 1200-03-09-.02(11)(f)3 and 2, 1200-03-09-.02(11)(d)1(i)(III), and 1200-03-09-.02(11)(a)2

A13. Reopening for cause.

- (a) A permit shall be reopened and revised prior to the expiration of the permit under any of the circumstances listed below:
 - 1. Additional applicable requirements under the Federal Act become applicable to the sources contained in this permit provided the permit has a remaining term of 3 or more years. Such a reopening shall be completed not later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the permit expiration date of this permit, unless the original has been extended pursuant to 1200-03-09-.02(11)(a)2.
 - **2.** Additional requirements become applicable to an affected source under the acid rain program.
 - **3.** The Technical Secretary or EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
 - **4.** The Technical Secretary or EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
- (b) Proceedings to reopen and issue a permit shall follow the same proceedings as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists, and not the entire permit. Such reopening shall be made as expeditiously as practicable.
- (c) Reopenings for cause shall not be initiated before a notice of such intent is provided to the permittee by the Technical Secretary at least 30 days in advance of the date that the permit is to be reopened except that the Technical Secretary may provide a shorter time period in the case of an emergency. An emergency shall be established by the criteria of T.C.A. 68-201-109 or other compelling reasons that public welfare is being adversely affected by the operation of a source that is in compliance with its permit requirements.
- (d) If the Administrator finds that cause exists to terminate, modify, or revoke and reissue a permit as identified in A13, he is required under federal rules to notify the Technical Secretary and the permittee of such findings in writing. Upon receipt of such notification, the Technical Secretary shall investigate the matter in order to determine if he agrees or disagrees with the Administrator's findings. If he agrees with the Administrator's findings, the Technical Secretary shall conduct the reopening in the following manner:

1. The Technical Secretary shall, within 90 days after receipt of such notification, forward to EPA a proposed determination of termination, modification, or revocation and reissuance, as appropriate. If the Administrator grants additional time to secure permit applications or additional information from the permittee, the Technical Secretary shall have the additional time period added to the standard 90 day time period.

- 2. EPA will evaluate the Technical Secretary's proposed revisions and respond as to their evaluation.
- **3.** If EPA agrees with the proposed revisions, the Technical Secretary shall proceed with the reopening in the same manner prescribed under Condition A13 (b) and Condition A13 (c).
- 4. If the Technical Secretary disagrees with either the findings or the Administrator that a permit should be reopened or an objection of the Administrator to a proposed revision to a permit submitted pursuant to Condition A13(d), he shall bring the matter to the Board at its next regularly scheduled meeting for instructions as to how he should proceed. The permittee shall be required to file a written brief expressing their position relative to the Administrator's objection and have a responsible official present at the meeting to answer questions for the Board. If the Board agrees that EPA is wrong in their demand for a permit revision, they shall instruct the Technical Secretary to conform to EPA's demand, but to issue the permit under protest preserving all rights available for litigation against EPA.

TAPCR 1200-03-09-.02(11)(f)6 and 7.

- **A14. Permit transference.** An administrative permit amendment allows for a change of ownership or operational control of a source where the Technical Secretary determines that no other change in the permit is necessary, provided that the following requirements are met:
 - (a) Transfer of ownership permit application is filed consistent with the provisions of 1200-03-09-.03(6), and
 - **(b)** written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the current and new permittee has been submitted to the Technical Secretary.

TAPCR 1200-03-09-.02(11)(f)4(i)(IV) and 1200-03-09-.03(6)

- **A15.** Air pollution alert. When the Technical Secretary has declared that an air pollution alert, an air pollution warning, or an air pollution emergency exists, the permittee must follow the requirements for that episode level as outlined in TAPCR 1200-03-09-.03(1) and TAPCR 1200-03-15-.03.
- A16. Construction permit required. Except as exempted in TAPCR 1200-03-09-.04, or excluded in subparagraph TAPCR 1200-03-02-.01(1)(aa) or subparagraph TAPCR 1200-03-02-.01(1)(cc), this facility shall not begin the construction of a new air contaminant source or the modification of an air contaminant source which may result in the discharge of air contaminants without first having applied for and received from the Technical Secretary a construction permit for the construction or modification of such air contaminant source.

TAPCR 1200-03-09-.01(1)(a)

- **A17.** Notification of changes. The permittee shall notify the Technical Secretary 30 days prior to commencement of any of the following changes to an air contaminant source which would not be a modification requiring a construction permit.
 - (a) change in air pollution control equipment
 - **(b)** change in stack height or diameter
 - (c) change in exit velocity of more than 25 percent or exit temperature of more than 15 percent based on absolute temperature.

TAPCR 1200-03-09-.02(7)

A18. Schedule of compliance. The permittee will comply with any applicable requirement that becomes effective during the permitterm on a timely basis. If the permittee is not in compliance the permittee must submit a schedule for coming into compliance which must include a schedule of remedial measure(s), including an enforceable set of deadlines for specific actions.

TAPCR 1200-03-09-.02(11)(d)3 and 40 CFR Part 70.5(c)

A19. Title VI.

(a) The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR, Part 82, Subpart F, except as provided for motor vehicle air conditioners (MVACs) in Subpart B:

- **1.** Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to Section 82.156.
- **2.** Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to Section 82.158.
- **3.** Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to Section 82.161.
- (b) If the permittee performs a service on motor (fleet) vehicles when this service involves ozone depleting substance refrigerant in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR, Part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners.
- (c) The permittee shall be allowed to switch from any ozone-depleting substance to any alternative that is listed in the Significant New Alternatives Program(SNAP) promulgated pursuant to 40 CFR, Part 82, Subpart G, Significant New Alternatives Policy Program.
- **A20.** The permittee shall comply with the requirement to submit to the Administrator or designated State Agency a risk management plan, including a registration that reflects all covered processes, by June 21, 1999, if the permittee's facility is required pursuant to 40 CFR, 68, to submit such a plan.

SECTION B

GENERAL CONDITIONS for MONITORING, REPORTING, and ENFORCEMENT

- **B1.** Recordkeeping. Monitoring and related record keeping shall be performed in accordance with the requirements specified in the permit conditions for each individual permit unit. In no case shall reports of any required monitoring and record keeping be submitted less frequently than every six months.
 - (a) Where applicable, records of required monitoring information include the following:
 - 1. The date, place as defined in the permit, and time of sampling or measurements;
 - 2. The date(s) analyses were performed;
 - **3.** The company or entity that performed the analysis;
 - **4.** The analytical techniques or methods used;
 - 5. The results of such analyses; and
 - **6.** The operating conditions as existing at the time of sampling or measurement.
 - (b) Digital data accumulation which utilizes valid data compression techniques shall be acceptable for compliance determination as long as such compression does not violate an applicable requirement and its use has been approved in advance by the Technical Secretary.

TAPCR 1200-03-09-.02(11)(e)1(iii)

Retention of monitoring data. The permittee shall retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.

TAPCR 1200-03-09-.02(11)(e)1(iii)(II)II

Reporting. Reports of any required monitoring and record keeping shall be submitted to the Technical Secretary in accordance with the frequencies specified in the permit conditions for each individual permit unit. Reports shall be submitted within 60 days of the close of the reporting period unless otherwise noted. All instances of deviations from permit requirements must be clearly identified in such reports. All required reports must be certified by a responsible official. Reports required under "State only requirements" are not required to be certified by a responsible official.

TAPCR 1200-03-09-.02(11)(e)1(iii)

B4. Certification. Except for reports required under "State Only" requirements, any application form, report or compliance certification submitted pursuant to the requirements of this permit shall contain certification by a responsible official of truth, accuracy and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.

TAPCR 1200-03-09-.02(11)(d)4

- **B5.** Annual compliance certification: The permittee shall submit annually compliance certifications with the terms and conditions contained in Sections A, B, D and E of this permit, including emission limitations, standards, or work practices. This compliance certification shall include all of the following (provided that the identification of applicable information may cross-reference the permit or previous reports, as applicable):
 - (a) The identification of each term or condition of the permit that is the basis of the certification;
 - (b) The identification of the method(s) or other means used by the owner or operator for determining the compliance status with each term and condition during the certification period; such methods and other means shall include, at a minimum, the methods and means required by this permit. If necessary, the owner or operator also shall identify any other material information that must be included in the certification to comply with section 113(c)(2) of the Federal Act, which prohibits knowingly making a false certification or omitting material information;
 - (c) The status of compliance with the terms and conditions of the permit for the period covered by the certification, including whether compliance during the period was continuous or intermittent. The certification shall be based on the method or means designated in E2(b)2 above. The certification shall identify each deviation and take it into account in the compliance certification. The certification shall also identify as possible exceptions to compliance any periods during which compliance is required and in which an *excursion or *exceedance as defined below occurred; and
 - (d) Such other facts as the Technical Secretary may require to determine the compliance status of the source.
 - * "Excursion" shall mean a departure from an indicator range established for monitoring under this paragraph, consistent with any averaging period specified for averaging the results of the monitoring.

** "Exceedance" shall mean a condition that is detected by monitoring that provides data in terms of an emission limitation or standard and that indicates that emissions (or opacity) are greater than the applicable emission limitation or standard (or less than the applicable standard in the case of a percent reduction requirement) consistent with any averaging period specified for averaging the results of the monitoring.

40 CFR Part 70.6(c)(5)(iii) as amended in the Federal Register Vol.79, No.144, July 28, 2014, pages 43661 through 43667.

B6. <u>Submission of compliance certification.</u> The compliance certification shall be submitted to:

The Tennessee Department of	and	Air and EPCRA Enforcement Branch
Environment and Conservation		US EPA Region IV
Environmental Field Office specified in		61 Forsyth Street, SW
Section E of this permit		Atlanta, Georgia 30303

TAPCR 1200-03-09-.02(11)(e)3(v)(IV)

- **Emergency provisions.** An emergency constitutes an affirmative defense to an enforcement action brought against this source for noncompliance with a technology based emission limitation due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.
 - (a) The affirmative defense of the emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:
 - 1. An emergency occurred and that the permittee can identify the probable cause(s) of the emergency. "Probable" must be supported by a credible investigation into the incident that seeks to identify the causes and results in an explanation supported by generally accepted engineering or scientific principles.
 - 2. The permitted source was at the time being properly operated. In determining whether or not a source was being properly operated, the Technical Secretary shall examine the source's written standard operating procedures which were in effect at the time of the noncompliance and any other code as detailed below that would be relevant to preventing the noncompliance. Adherence to the source's standard operating procedures will be the test of adequate preventative maintenance, careless operation, improper operation or operator error to the extent that such adherence would prevent noncompliance. The source's failure to follow recognized standards of practice to the extent that adherence to such a standard would have prevented noncompliance will disqualify the source from any claim of an emergency and an affirmative defense.
 - **3.** During the period of the emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit.
 - **4.** The permittee submitted notice of the emergency to the Technical Secretary according to the notification criteria for malfunctions in rule 1200-03-20-.03. For the purposes of this condition, "emergency" shall be substituted for "malfunction(s)" in rule 1200-03-20-.03 to determine the relevant notification threshold. The notice shall include a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.
 - (b) In any enforcement proceeding the permittee seeking to establish the occurrence of an emergency has the burden of proof.
 - (c) The provisions of this condition are in addition to any emergency, malfunction or upset requirement contained in Division 1200-03 or other applicable requirement.

TAPCR 1200-03-09-.02(11)(e)7

B8. <u>Excess emissions reporting.</u>

- (a) The permittee shall promptly notify the Technical Secretary when any emission source, air pollution control equipment, or related facility breaks down in such a manner to cause the emission of air contaminants in excess of the applicable emission standards contained in Division 1200-03 or any permit issued thereto, or of sufficient duration to cause damage to property or public health. The permittee must provide the Technical Secretary with a statement giving all pertinent facts, including the estimated duration of the breakdown. Violations of the visible emission standard which occur for less than 20 minutes in one day (midnight to midnight) need not be reported. Prompt notification will be within 24 hours of the malfunction and shall be provided by telephone to the Division's Nashville office. The Technical Secretary shall be notified when the condition causing the failure or breakdown has been corrected. In attainment and unclassified areas if emissions other than from sources designated as significantly impacting on a nonattainment area in excess of the standards will not and do not occur over more than a 24-hour period (or will not recur over more than a 24-hour period) and no damage to property and or public health is anticipated, notification is not required.
- (b) Any malfunction that creates an imminent hazard to health must be reported by telephone immediately to the Division's Nashville office at (615) 532-0554 and to the State Civil Defense.

(c) A log of all malfunctions, startups, and shutdowns resulting in emissions in excess of the standards in Division 1200-03 or any permit issued thereto must be kept at the plant. All information shall be entered in the log no later than twenty-four (24) hours after the startup or shutdown is complete, or the malfunction has ceased or has been corrected. Any later discovered corrections can be added in the log as footnotes with the reason given for the change. This log must record at least the following:

- 1. Stack or emission point involved
- 2. Time malfunction, startup, or shutdown began and/or when first noticed
- **3.** Type of malfunction and/or reason for shutdown
- 4. Time startup or shutdown was complete or time the air contaminant source returned to normal operation
- 5. The company employee making entry on the log must sign, date, and indicate the time of each log entry

The information under items 1. and 2. must be entered into the log by the end of the shift during which the malfunction or startup began. For any source utilizing continuous emission(s) monitoring, continuous emission(s) monitoring collection satisfies the above log keeping requirement.

TAPCR 1200-03-20-.03 and .04

Malfunctions, startups and shutdowns - reasonable measures required. The permittee must take all reasonable measures to keep emissions to a minimum during startups, shutdowns, and malfunctions. These measures may include installation and use of alternate control systems, changes in operating methods or procedures, cessation of operation until the process equipment and/or air pollution control equipment is repaired, maintaining sufficient spare parts, use of overtime labor, use of outside consultants and contractors, and other appropriate means. Failures that are caused by poor maintenance, careless operation or any other preventable upset condition or preventable equipment breakdown shall not be considered malfunctions. This provision does not apply to standards found in 40 CFR, Parts 60(Standards of performance for new stationary sources), 61(National emission standards for hazardous air pollutants) and 63(National emission standards for hazardous air pollutants for source categories).

TAPCR 1200-03-20-.02

- **Report required upon the issuance of a notice of violation for excess emissions.** The permittee must submit within twenty (20) days after receipt of the notice of violation, the data shown below to assist the Technical Secretary in deciding whether to excuse or validate the violation. If this data has previously been available to the Technical Secretary prior to the issuance of the notice of violation no further action is required of the violating source. However, if the source desires to submit additional information, then this must be submitted within the same twenty (20) day time period. The minimum data requirements are:
 - (a) The identity of the stack and/or other emission point where the excess emission(s) occurred;
 - (b) The magnitude of the excess emissions expressed in pounds per hour and the units of the applicable emission limitation and the operating data and calculations used in determining the magnitude of the excess emissions;
 - (c) The time and duration of the emissions;
 - (d) The nature and cause of such emissions;
 - **(e)** For malfunctions, the steps taken to correct the situation and the action taken or planned to prevent the recurrence of such malfunctions;
 - (f) The steps taken to limit the excess emissions during the occurrence reported, and
 - (g) If applicable, documentation that the air pollution control equipment, process equipment, or processes were at all times maintained and operated in a manner consistent with good operating practices for minimizing emissions.

Failure to submit the required report within the twenty (20) day period specified shall preclude the admissibility of the data for consideration of excusal for malfunctions.

TAPCR 1200-03-20-.06(2), (3) and (4)

SECTION C

PERMIT CHANGES

- **C1.** Operational flexibility changes. The source may make operational flexibility changes that are not addressed or prohibited by the permit without a permit revision subject to the following requirements:
 - (a) The change cannot be subject to a requirement of Title IV of the Federal Act or Chapter 1200-03-30.
 - (b) The change cannot be a modification under any provision of Title I of the federal Act or Division 1200-03.
 - (c) Each change shall meet all applicable requirements and shall not violate any existing permit term or condition.
 - (d) The source must provide contemporaneous written notice to the Technical Secretary and EPA of each such change, except for changes that are below the threshold of levels that are specified in Rule 1200-03-09-.04.
 - (e) Each change shall be described in the notice including the date, any change in emissions, pollutants emitted, and any applicable requirements that would apply as a result of the change.
 - (f) The change shall not qualify for a permit shield under the provisions of part 1200-03-09-.02(11)(e)6.
 - (g) The permittee shall keep a record describing the changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those changes. The records shall be retained until the changes are incorporated into subsequently issued permits.

TAPCR 1200-03-09-.02(11)(a)4 (ii)

C2. Section 502(b)(10) changes.

- (a) The permittee can make certain changes without requiring a permit revision, if the changes are not modifications under Title I of the Federal Act or Division 1200-03 and the changes do not exceed the emissions allowable under the permit. The permittee must, however, provide the Administrator and Technical Secretary with written notification within a minimum of 7 days in advance of the proposed changes. The Technical Secretary may waive the 7 day advance notice in instances where the source demonstrates in writing that an emergency necessitates the change. Emergency shall be demonstrated by the criteria of TAPCR 1200-03-09-.02(11)(e)7 and in no way shall it include changes solely to take advantages of an unforeseen business opportunity. The Technical Secretary and EPA shall attach each such notice to their copy of the relevant permit.
- (b) The written notification must be signed by a facility Title V responsible official and include the following:
 - 1. a brief description of the change within the permitted facility;
 - **2.** the date on which the change will occur;
 - **3.** a declaration and quantification of any change in emissions;
 - 4. a declaration of any permit term or condition that is no longer applicable as a result of the change; and
 - 5. <u>a declaration that the requested change is not a Title I modification and will not exceed allowable emissions under the permit.</u>
- (c) The permit shield provisions of TAPCR 1200-03-09-.02(11)(e)6 shall not apply to Section 502(b)(10) changes.

TAPCR 1200-03-09-.02(11)(a)4 (i)

C3. Administrative amendment.

- (a) Administrative permit amendments to this permit shall be in accordance with 1200-03-09-.02(11)(f)4. The source may implement the changes addressed in the request for an administrative amendment immediately upon submittal of the request.
- (b) The permit shield shall be extended as part of an administrative permit amendment revision consistent with the provisions of TAPCR 1200-03-09-.02(11)(e)6 for such revisions made pursuant to item (c) of this condition which meet the relevant requirements of TAPCR 1200-03-09-.02(11)(e), TAPCR 1200-03-09-.02(11)(f) and TAPCR 1200-03-09-.02(11)(g) for significant permit modifications.
- (c) Proceedings to review and grant administrative permit amendments shall be limited to only those parts of the permit for which cause to amend exists, and not the entire permit.

TAPCR 1200-03-09-.02(11)(f)4

C4. <u>Minor permit modifications.</u>

- (a) The permittee may submit an application for a minor permit modification in accordance with TAPCR 1200-03-09-.02(11)(f)5(ii).
- (b) The permittee may make the change proposed in its minor permit modification immediately after an application is filed with the Technical Secretary.
- (c) Proceedings to review and modify permits shall be limited to only those parts of the permit for which cause to modify exists, and not the entire permit.

(d) Minor permit modifications do not qualify for a permit shield.

TAPCR 1200-03-09-.02(11)(f)5(ii)

C5. <u>Significant permit modifications.</u>

- (a) The permittee may submit an application for a significant modification in accordance with TAPCR 1200-03-09-.02(11)(f)5(iv).
- **(b)** Proceedings to review and modify permits shall be limited to only those parts of the permit for which cause to modify exists, and not the entire permit.

TAPCR 1200-03-09-.02(11)(f)5(iv)

C6. New construction or modifications.

Future construction at this facility that is subject to the provisions of TAPCR 1200-03-09-.01 shall be governed by the following:

- (a) The permittee shall designate in their construction permit application the route that they desire to follow for the purposes of incorporating the newly constructed or modified sources into their existing operating permit. The Technical Secretary shall use that information to prepare the operating permit application submittal deadlines in their construction permit.
- (b) Sources desiring the permit shield shall choose the administrative amendment route of TAPCR 1200-03-09-.02(11)(f)4 or the significant modification route of TAPCR 1200-03-09-.02(11)(f)5(iv).
- (c) Sources desiring expediency instead of the permit shield shall choose the minor permit modification procedure route of TAPCR 1200-03-09-.02(11)(f)5(ii) or group processing of minor modifications under the provisions of TAPCR 1200-03-09-.02(11)(f)5(iii) as applicable to the magnitude of their construction.

TAPCR 1200-03-09-.02(11)(d) 1(i)(V)

SECTION D

GENERAL APPLICABLE REQUIREMENTS

D1. <u>Visible emissions.</u> With the exception of air emission sources exempt from the requirements of TAPCR Chapter 1200-03-05 and air emission sources for which a different opacity standard is specifically provided elsewhere in this permit, the permittee shall not cause, suffer, allow or permit discharge of a visible emission from any air contaminant source with an opacity in excess of twenty (20) percent for an aggregate of more than five (5) minutes in any one (1)hour or more than twenty (20) minutes in any twenty-four (24) hour period; provided, however, that for fuel burning installations with fuel burning equipment of input capacity greater than 600 million btu per hour, the permittee shall not cause, suffer, allow, or permit discharge of a visible emission from any fuel burning installation with an opacity in excess of twenty (20) percent (6-minute average) except for one six minute period per one (1) hour of not more than forty (40) percent opacity. Sources constructed or modified after July 7, 1992 shall utilize 6-minute averaging.

Consistent with the requirements of TAPCR Chapter 1200-03-20, due allowance may be made for visible emissions in excess of that permitted under TAPCR 1200-03-05 which are necessary or unavoidable due to routine startup and shutdown conditions. The facility shall maintain a continuous, current log of all excess visible emissions showing the time at which such conditions began and ended and that such record shall be available to the Technical Secretary or his representative upon his request.

TAPCR 1200-03-05-.01(1), TAPCR 1200-03-05-.03(6) and TAPCR 1200-03-05-.02(1)

D2. General provisions and applicability for non-process gaseous emissions. Any person constructing or otherwise establishing a non-portable air contaminant source emitting gaseous air contaminants after April 3, 1972, or relocating an air contaminant source more than 1.0 km from the previous position after November 6, 1988, shall install and utilize the best equipment and technology currently available for controlling such gaseous emissions.

TAPCR 1200-03-06-.03(2)

- **D3.** <u>Non-process emission standards.</u> The permittee shall not cause, suffer, allow, or permit particulate emissions from non-process sources in excess of the standards in TAPCR 1200-03-06.
- **D4.** General provisions and applicability for process gaseous emissions. Any person constructing or otherwise establishing an air contaminant source emitting gaseous air contaminants after April 3, 1972, or relocating an air contaminant source more than 1.0 km from the previous position after November 6, 1988, shall install and utilize equipment and technology which is deemed reasonable and proper by the Technical Secretary.

TAPCR 1200-03-07-.07(2)

- **Particulate emissions from process emission sources.** The permittee shall not cause, suffer, allow, or permit particulate emissions from process sources in excess of the standards in TAPCR 1200-03-07.
- **D6.** Sulfur dioxide emission standards. The permittee shall not cause, suffer, allow, or permit Sulfur dioxide emissions from process and non-process sources in excess of the standards in TAPCR 1200-03-14. Regardless of the specific emission standard, new process sources shall utilize the best available control technology as deemed appropriate by the Technical Secretary of the Tennessee Air Pollution Control Board.
- D7. Fugitive Dust.
 - (a) The permittee shall not cause, suffer, allow, or permit any materials to be handled, transported, or stored; or a building, its appurtenances, or a road to be used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne. Such reasonable precautions shall include, but not be limited to, the following:
 - 1. Use, where possible, of water or chemicals for control of dust in demolition of existing buildings or structures, construction operations, grading of roads, or the clearing of land;
 - 2. Application of asphalt, oil, water, or suitable chemicals on dirt roads, material stock piles, and other surfaces which can create airborne dusts;

3. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials. Adequate containment methods shall be employed during sandblasting or other similar operations.

(b) The permittee shall not cause, suffer, allow, or permit fugitive dust to be emitted in such manner to exceed five (5) minutes per hour or twenty (20) minutes per day as to produce a visible emission beyond the property line of the property on which the emission originates, excluding malfunction of equipment as provided in Chapter 1200-03-20.

TAPCR 1200-03-08

D8. Open burning. The permittee shall comply with the TAPCR 1200-03-04 for all open burning activities at the facility.

TAPCR 1200-03-04

D9. <u>Asbestos.</u> Where applicable, the permittee shall comply with the requirements of 1200-03-11-.02(2)(d) when conducting any renovation or demolition activities at the facility.

TAPCR 1200-03-11-.02(2)(d) and 40 CFR, Part 61

D10. Annual certification of compliance. The generally applicable requirements set forth in Section D of this permit are intended to apply to activities and sources that are not subject to source-specific applicable requirements contained in State of Tennessee and U.S. EPA regulations. By annual certification of compliance, the permittee shall be considered to meet the monitoring and related record keeping and reporting requirements of TAPCR 1200-03-09-.02(11)(e)1.(iii) and 1200-03-10-.04(2)(b)1 and compliance requirements of TAPCR 1200-03-09-.02(11)(e)3.(i). The permittee shall submit compliance certification for these conditions annually.

SECTION E

SOURCE SPECIFIC EMISSION STANDARDS, OPERATING LIMITATIONS, and MONITORING, RECORDKEEPING and REPORTING REQUIREMENTS

63-0135	Facility Description:	This facility manufactures ceramic tile. Its operations include the following: Raw
		material processing, handling and storage; Spray drying; Tile preparation; and Kiln
		processing.

Conditions E1 through E3-20 apply to all sources in Section E of this permit unless otherwise noted.

E1. Fee payment: allowable emissions basis.

FEE EMISSIONS SUMMARY TABLE FOR MAJOR SOURCE 63-0135

REGULATED POLLUTANTS	ALLOWABLE EMISSIONS (tons per AAP)	ACTUAL EMISSIONS (tons per AAP)	COMMENTS	
PARTICULATE MATTER (PM)	100.5	N/A		
PM_{10}	N/A	N/A		
SO_2	167.2	N/A		
VOC	122.3	N/A		
NO_X	121.4	N/A		
Sulfuric Acid (H ₂ SO ₄)	9.6	N/A		
CATEGORY OF MISCELLANEOUS HAZARDOUS AIR POLLUTANTS (HAP WITHOUT A STANDARD)*				
VOC FAMILY GROUP	N/A	N/A		
NON-VOC GASEOUS GROUP	15.6	N/A	Fee emissions are not included above (Hydrogen Fluoride and Hydrogen Chloride).	
PM FAMILY GROUP	N/A	N/A		
CATEGORY OF SPECIF	TC HAZARDOUS	AIR POLLUTAN	ΓS (HAP WITH A STANDARD)**	
VOC FAMILY GROUP	N/A	N/A		
NON-VOC GASEOUS GROUP	N/A	N/A		
PM FAMILY GROUP	N/A	N/A		
CATEGORY OF NSPS POLLUTANTS NOT LISTED ABOVE***				
EACH NSPS POLLUTANT NOT LISTED ABOVE	N/A	N/A		

NOTES

- AAP The Annual Accounting Period (AAP) is a twelve (12) consecutive month period that begins each July 1st and ends June 30th of the following year. The present Annual Accounting Period began July 1, 2015 and ends June 30, 2016. The next Annual Accounting Period begins July 1, 2016 and ends June 30, 2017.
- N/A N/A indicates that no emissions are specified for fee computation.
- AEAR AEAR indicates that an Actual Emissions Analysis is Required to determine the actual emissions of:
 - (1) each regulated pollutant (Particulate matter, SO_2 , VOC, NO_X and so forth. See TAPCR 1200-03-26-.02(2)(i) for the definition of a regulated pollutant.),
 - (2) each pollutant group (VOC Family, Non-VOC Gaseous, and Particulate Family), and
 - (3) the Miscellaneous HAP Category under consideration during the Annual Accounting Period.
- * Category Of Miscellaneous HAP (HAP Without A Standard): This category is made-up of hazardous air pollutants that do not have a federal or state standard. Each HAP is classified into one of three groups, the VOC Family group, the Non-VOC Gaseous group, or the Particulate (PM) Family group. For fee computation, the Miscellaneous HAP Category is subject to the 4,000 ton cap provisions of subparagraph 1200-03-26-.02(2)(i).

** Category Of Specific HAP (HAP With A Standard): This category is made-up of hazardous air pollutants (HAP) that are subject to Federally promulgated Hazardous Air Pollutant Standards that can be imposed under Chapter 1200-03-11 or Chapter 1200-03-31. Each individual hazardous air pollutant is classified into one of three groups, the VOC Family group, the Non-VOC Gaseous group, or the Particulate (PM) Family group. For fee computation, each individual hazardous air pollutant of the Specific HAP Category is subject to the 4,000 ton cap provisions of subparagraph 1200-03-26-.02(2)(i).

*** Category Of NSPS Pollutants Not Listed Above: This category is made-up of each New Source Performance Standard (NSPS) pollutant whose emissions are not included in the PM, SO₂, VOC or NO_X emissions from each source in this permit. For fee computation, each NSPS pollutant not listed above is subject to the 4,000 ton cap provisions of subparagraph 1200-03-26-.02(2)(i).

END NOTES

The permittee shall:

- (1) Pay annual allowable based emission fees for the present Annual Accounting Period.
- Pay major source annual **allowable based emission fees**, as requested by the responsible official, in accordance with the above **Fee Emissions Summary Table** beginning July 1, **2016** of the **next annual accounting period**.

The Tennessee Air Pollution Control Division will bill the permittee no later than April 1 prior to the end of each **annual accounting period**. The annual emission fee is due July 1 following the end of each **annual accounting period**. If any part of any fee imposed under TAPCR 1200-03-26-.02 is not paid within fifteen (15) days of the due date, penalties shall at once accrue as specified in TAPCR 1200-03-26-.02(8). Emissions for regulated pollutants shall not be double counted as specified in Condition A8(d) of this permit.

Payment of the fee due shall be submitted to the address below.

Tennessee Division of Fiscal Services William R. Snodgrass Tennessee Tower 312 Rosa L. Parks Avenue, 10th Floor Nashville, TN 37243

TAPCR 1200-03-26-.02 (3) and (9), and 1200-03-09-.02(11)(e)1 (vii)

E2. Reporting requirements

(a) <u>Semiannual reports.</u> The first report since issuance of this permit shall cover the 6-month period from <u>April 1</u>, <u>2016</u>, to <u>September 30, 2016</u>, and shall be submitted within 60 days after the 6-month period ending <u>September 30, 2016</u>. Subsequent reports shall be submitted within 60 days after the end of each 6-month period following the first report.

Start of Semiannual	End of Semiannual	Semiannual Report
Report Period	Report Period	Due
April 1, 2016	September 30, 2016	November 29, 2016
October 1, 2016	March 31, 2017	May 30, 2017
April 1, 2017	September 30, 2017	November 29, 2017
October 1, 2017	March 31, 2018	May 30, 2018
April 1, 2018	September 30, 2018	November 29, 2018
October 1, 2018	March 31, 2019	May 30, 2019
April 1, 2019	September 30, 2019	November 29, 2019
October 1, 2019	March 31, 2020	May 30, 2020
April 1, 2020	September 30, 2020	November 29, 2020
October 1, 20XX	March 31, 20XX +1	May 30, 20XX + 1
April 1, 20XX + 1	September 30, 20XX + 1	November 29, 20XX+1

These semiannual reports shall include:

- (1) Any monitoring and recordkeeping required by Conditions E4-2, E4-6, E5-1, E6-1, E7-1, E7-2, E8-1, E8-4, E8-5, E8-13, E9-1, E9-4, E9-5, E9-15, and E10-16 of this permit. However, a summary report of this data is acceptable provided there is sufficient information to enable the Technical Secretary to evaluate compliance.
- (2) The visible emission evaluation readings from Conditions E3-1, E4-3, E4-12, E5-2, E6-2, E7-3, and E8-12 of this permit if required. However, a summary report of this data is acceptable provided there is sufficient information to enable the Technical Secretary to evaluate compliance.
- (3) Identification of all instances of deviations from **ALL PERMIT REQUIREMENTS**.

These reports must be certified by a responsible official consistent with condition B4 of this permit and shall be submitted to the Nashville Environmental Field Office at the address below. In lieu of mailing a hard copy of the report, the permittee may submit an electronic copy of the report to both of the email addresses below.

Nashville Environmental Field Office Division of Air Pollution Control 711 R. S. Gass Blvd. Nashville, TN 37216	OR	air.pollution.control@tn.gov and APC.NashEFO@tn.gov
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TAPCR 1200-03-09-.02(11)(e)1.(iii)

E2. Reporting requirements (cont.).

(b) Annual compliance certification: The permittee shall submit annually compliance certifications with the terms and conditions contained in Sections A, B, D and E of this permit, including emission limitations, standards, or work practices. This compliance certification shall include all of the following (provided that the identification of applicable information may cross-reference the permit or previous reports, as applicable):

- (1) The identification of each term or condition of the permit that is the basis of the certification;
- (2) The identification of the method(s) or other means used by the owner or operator for determining the compliance status with each term and condition during the certification period; such methods and other means shall include, at a minimum, the methods and means required by this permit. If necessary, the owner or operator also shall identify any other material information that must be included in the certification to comply with section 113(c)(2) of the Federal Act, which prohibits knowingly making a false certification or omitting material information:
- (3) The status of compliance with the terms and conditions of the permit for the period covered by the certification, including whether compliance during the period was continuous or intermittent. The certification shall be based on the method or means designated in **E2(b)2** above. The certification shall identify each deviation and take it into account in the compliance certification. The certification shall also identify as possible exceptions to compliance any periods during which compliance is required and in which an *excursion or *exceedance as defined below occurred; and
- (4) Such other facts as the Technical Secretary may require to determine the compliance status of the source.
- * "Excursion" shall mean a departure from an indicator range established for monitoring under this paragraph, consistent with any averaging period specified for averaging the results of the monitoring.
- ** "Exceedance" shall mean a condition that is detected by monitoring that provides data in terms of an emission limitation or standard and that indicates that emissions (or opacity) are greater than the applicable emission limitation or standard (or less than the applicable standard in the case of a percent reduction requirement) consistent with any averaging period specified for averaging the results of the monitoring.

The first certification since issuance of this permit renewal shall cover the 12-month period from October 1, 2015 to September 30, 2016 and shall be submitted within 60 days after the 12-month period ending September 30, 2016. Subsequent certifications shall be submitted within 60 days after the end of each 12-month period following the first certification.

Start of Annual Compliance Certification Period	End of Annual Compliance Certification Period	Annual Compliance Certification Due
October 1, 2015	September 30, 2016	November 29, 2016
October 1, 2016	September 30, 2017	November 29, 2017
October 1, 2017	September 30, 2018	November 29, 2018
October 1, 2018	September 30, 2019	November 29, 2019
October 1, 2019	September 30, 2020	November 29, 2020
October 1, 2020	September 30, 2021	November 29, 2021
October 1, 20XX	September 30, 20XX+1	November 29, 20XX+1

These certifications must be certified by a responsible official consistent with condition B4 of this permit and shall be submitted to the Nashville Environmental Field Office and U.S. EPA at the addresses below. In lieu of mailing a hard copy of the certification to the Nashville Environmental Field Office, the permittee may submit an electronic copy of the certification to both of the email addresses below.

Nashville Environmental Field Office Division of Air Pollution Control 711 R. S. Gass Blvd. Nashville, TN 37216	and	Air and EPCRA Enforcement Branch US EPA Region IV 61 Forsyth Street, SW Atlanta, Georgia 30303
OR air.pollution.control@tn.gov and APC.NashEFO@tn.gov		Atlanta, Georgia 30303

40 CFR Part 70.6(c)(5)(iii) as amended in the Federal Register Vol.79, No.144, July 28, 2014, pages 43661 through 43667. TAPCR 1200-03-09-.02(11)(e)1.(iii)(II)II

E2. Reporting requirements (cont.)

(c) <u>NESHAP Semiannual reports.</u> The first report since issuance of this permit shall cover the 6-month period from <u>April 1, 2016</u>, to <u>September 30, 2016</u>, and shall be submitted within 60 days after the 6-month period ending <u>September 30, 2016</u>. Subsequent reports shall be submitted within 60 days after the end of each 6-month period following the first report.

Start of Semiannual	End of Semiannual	Semiannual Report
Report Period	Report Period	Due
April 1, 2016	September 30, 2016	November 29, 2016
October 1, 2016	March 31, 2017	May 30, 2017
April 1, 2017	September 30, 2017	November 29, 2017
October 1, 2017	March 31, 2018	May 30, 2018
April 1, 2018	September 30, 2018	November 29, 2018
October 1, 2018	March 31, 2019	May 30, 2019
April 1, 2019	September 30, 2019	November 29, 2019
October 1, 2019	March 31, 2020	May 30, 2020
April 1, 2020	September 30, 2020	November 29, 2020
October 1, 20XX	March 31, 20XX +1	May 30, 20XX + 1
April 1, 20XX + 1	September 30, 20XX + 1	November 29, 20XX+1

These semiannual reports shall include:

- (1) Any monitoring and recordkeeping required by Conditions E3-11, E3-12, E3-13, E3-14, E3-15, E3-16, and E3-17 of this permit. However, a summary report of this data is acceptable provided there is sufficient information to enable the Technical Secretary to evaluate compliance.
- (2) Identification of all instances of deviations from Conditions E3-11, E3-12, E3-13, E3-14, E3-15, E3-16, and E3-17 of this permit.

These reports must be certified by a responsible official consistent with condition B4 of this permit and shall be submitted to the Nashville Central Office at the address below. In lieu of mailing a hard copy of the report, the permittee may submit an electronic copy of the report to the email address below.

Tennessee Division of Air Pollution Control William R. Snodgrass Tennessee Tower 312 Rosa L. Parks Avenue, 15 th Floor Nashville, TN 37243	OR	air.pollution.control@tn.gov
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TAPCR 1200-03-09-.02(11)(e)1.(iii)

E3. General Permit Requirements.

E3-1. Visible emissions from this facility (not addressed in the source specific sections) shall not exhibit greater than twenty percent (20%) opacity, except for one (1) six-minute period in any one (1) hour period, and for no more than four (4) six-minute periods in any twenty-four (24) hour period. Visible emissions from this source shall be determined by EPA Method 9, as published in the current 40 CFR 60, Appendix A (six-minute average). TAPCR 1200-03-05-.03(6) and TAPCR 1200-03-05-.01(1)

Compliance Method: The permittee shall assure compliance with the opacity standard by utilizing the opacity matrix dated June 18, 1996 that is enclosed as Attachment 2.

If the magnitude and frequency of excursions reported by the permittee in the periodic monitoring for emissions is unsatisfactory to the Technical Secretary, this permit may be reopened to impose additional opacity monitoring requirements.

- **E3-2.** The source(s) controlled by the air pollution control device(s) shall not operate unless the control device(s) is in operation. In the event a malfunction/failure of a control device(s) occurs, the operation of the process(es) controlled by the control device(s) shall be regulated by the provisions of Chapter 1200-03-20 of the Tennessee Air Pollution Control Regulations.
- E3-3. Routine maintenance as required to comply with the specified emission limits shall be performed on the air pollution control devices. Monthly logs of maintenance and/or repair for each air pollution control device shall be kept. This includes, but is not limited to, baghouses, electrostatic precipitators, scrubbers, cyclones, and other air pollution control devices. The logs shall denote what maintenance and what repair was done, when it was done, by whom, and when problems were rectified denoting date accomplished. Use of computer-generated logs are also acceptable. Each maintenance/repair log must be made available upon request by the Technical Secretary or his representative. Such logs must be maintained for 5 years. Records from these logs are not required to be submitted semiannually unless required in Condition E2(a)(1) or under MACT reporting.
- **E3-4.** Logs and records specified in this permit shall be made available upon request by the Technical Secretary or his representative and shall be retained for a period of not less than five years unless otherwise noted. Logs and records contained in this permit may be based on a recommended format. Any logs that have an alternative format may be utilized provided such logs contain the same information that is required. Computer-generated logs are also acceptable. Logs and records are not required to be submitted semiannually unless specified in Condition E2(a)(1).
- **E3-5.** All records required by any condition in Section E of this permit must be retained for a period of not less than five (5) years. Additionally, these records shall be kept available for inspection by the Technical Secretary or his representative. All yearly data, including all required calculations, must be entered in the log(s) no later than thirty (30) days from the end of the year for which the data is required. All monthly data, including all required calculations, must be entered in the log(s) no later than thirty (30) days from the end of the month for which the data is required. All daily data, including all required calculations, must be entered in the log(s) no later than seven (7) days from the end of the day for which the data is required.
- **E3-6.** The permittee is not required to file an accidental release plan pursuant to Section 112(r) of the Clean Air Act and 1200-03-32 of TAPCR.
- E3-7. Pursuant to 1200-3-10-.04(2)(a)2. of TAPCR, gauges, indicators, and similar devices used to measure and conduct parametric monitoring of control equipment must maintain an operational availability of at least 95%. Logs and records to substantiate such operational availability must be kept and such records shall be made available to the Technical Secretary or his representative upon request.
- **E3-8.** Carbon monoxide (CO) emitted from the entire facility shall not exceed 240.0 tons during all intervals of 12 consecutive months.

TAPCR 1200-03-07-.01(5); Letter of agreement dated April 1, 2014

E3-9. The maximum emission rate from the entire facility for any single hazardous air pollutant (HAP), listed pursuant to Section 112(b) of the Federal Act, shall not exceed 9.9 tons per year. Total emissions of all HAPs from the entire facility shall not exceed 24.9 tons per year. In the event that the emission rates from the entire facility exceed these limits, the permittee shall provide written notification of the exceedance(s) to the Technical Secretary within fifteen (15) days from the date of discovery.

TAPCR 1200-03-07-.01(5); Letter of agreement dated September 17, 2013

- **E3-10.** This facility (63-0135) is subject to the National Emission Standards for Hazardous Air Pollutants for Clay Ceramics Manufacturing Area Sources (40 CFR Part 63, Subpart RRRRRR). **Conditions E3-10** through **E3-17** state the applicable requirements. The permittee must comply with the applicable requirements by the issuance date of Significant Modification #1.
- **E3-11.** Pursuant to 40 CFR §63.11438(a), for each kiln that fires glazed ceramic ware, the permittee must maintain the peak temperature below 1540 °C (2800 °F) and comply with one of the management practices in paragraphs (1) and (2) of this condition:
 - (1) Use natural gas, or equivalent clean-burning fuel, as the kiln fuel; or
 - (2) Use an electric-powered kiln.
- **E3-12.** Pursuant to 40 CFR §63.11438(b), the permittee must maintain annual wet glaze usage records for the entire facility. Pursuant to 40 CFR §63.11438(e), surface applications (e.g., wet glazes) containing less than 0.1 (weight) percent clay ceramics metal HAP do not have to be considered in determination of the 227 Mg/yr (250 tpy) threshold for wet glaze usage.

Pursuant to 40 CFR §63.11438(c), for each atomized glaze spray booth located at a clay ceramics manufacturing facility that uses more than 227 Mg/yr (250 tpy) of wet glaze(s), the permittee must comply with the equipment standard requirements in paragraph (c)(1) of this condition or the management practice in paragraph (c)(2) of this condition.

- (1) Control the emissions from the atomized glaze spray booth with an air pollution control device (APCD), as defined below.
 - (i) Operate and maintain the APCD in accordance with the equipment manufacturer's specifications; and
 - (ii) Monitor the APCD according to the applicable requirements in **Condition E3-14**.
- (2) Alternatively, use wet glazes containing less than 0.1 (weight) percent clay ceramics metal HAP.

Pursuant to 40 CFR §63.11438(d), for each atomized glaze spray booth located at a clay ceramics manufacturing facility that uses 227 Mg/yr (250 tpy) or less of wet glaze(s), the permittee must comply with one of the management practices or equipment standards in paragraphs (d)(1) and (2) of this condition.

- (1) Employ waste minimization practices, as defined below; or
- (2) Alternatively, comply with the equipment standard requirements described in paragraph 40 CFR §63.11438(c)(1) or the management practice described in paragraph 40 CFR §63.11438(c)(2).

Pursuant to 40 CFR §63.11444, an air pollution control device (APCD) means any equipment that reduces the quantity of a pollutant that is emitted to the air. Examples of APCD currently used on glaze spray booths include, but are not limited to, wet scrubbers, fabric filters, water curtains, and water-wash systems. Pursuant to 40 CFR §63.11444, waste minimization practices mean those procedures employed to minimize material losses and prevent unnecessary waste generation, for example, minimizing glaze overspray emissions using HVLP spray equipment (defined in this section) or similar spray equipment; minimizing HAP emissions during cleanup of spray glazing equipment; operating and maintaining spray glazing equipment according to manufacturer's instructions; and minimizing spills through careful handling of HAP-containing glaze materials. Pursuant to 40 CFR §63.11444, high-volume, low-pressure (HVLP) spray equipment means a type of air atomized spray equipment that operates at low atomizing air pressure (0.1 to 10 pounds per square inch (psi) at the air nozzle) and uses 15 to 30 cubic feet per minute (cfm) of air to minimize the amount of overspray and bounce back.

E3-13. Pursuant to 40 CFR §63.11440(a), for each kiln firing glazed ceramic ware, the permittee must conduct a daily check of the peak firing temperature. If the peak temperature exceeds 1540 °C (2800 °F), the permittee must take corrective action according to the permittee's standard operating procedures.

E3-14. Pursuant to 40 CFR §63.11440(b), for each existing or new atomized glaze spray booth equipped with an APCD, the permittee must demonstrate compliance by conducting the monitoring activities in paragraph (1) and either paragraph (2) or (3) of this condition:

- (1) Initial control device inspection. The permittee must conduct an initial inspection of each particulate matter (PM) control device according to the requirements in paragraphs (1)(i) or (ii) of this condition. The permittee must conduct each inspection no later than 60 days after your applicable compliance date for each installed control device which has been operated within 60 days of the compliance date. For an installed control device which has not been operated within 60 days of the compliance date, the permittee must conduct an initial inspection prior to startup of the control device.
 - (i) For each wet control system, the permittee must verify the presence of water flow to the control equipment. The permittee must also visually inspect the system ductwork and control equipment for leaks and inspect the interior of the control equipment (if applicable) for structural integrity and the condition of the control system. An initial inspection of the internal components of a wet control system is not required if an inspection has been performed within the past 12 months.
 - (ii) For each baghouse, the permittee must visually inspect the system ductwork and baghouse unit for leaks. The permittee must also inspect the inside of each baghouse for structural integrity and fabric filter condition. The permittee must record the results of the inspection and any maintenance action as required in **Condition E3-16**. An initial inspection of the internal components of a baghouse is not required if an inspection has been performed within the past 12 months.
- (2) Periodic inspections/maintenance. Except as provided in paragraph (3) of this condition, the permittee must perform periodic inspections and maintenance of each PM control device following the initial inspection according to the requirements in paragraphs (2)(i) or (ii) of this condition.
 - (i) The permittee must inspect and maintain each wet control system according to the requirements in paragraphs (2)(i)(A) through (C) of this condition.
 - (A) The permittee must conduct a daily inspection to verify the presence of water flow to the wet control system.
 - (B) The permittee must conduct weekly visual inspections of the system ductwork and control equipment for leaks.
 - (C) The permittee must conduct inspections of the interior of the wet control system (if applicable) to determine the structural integrity and condition of the control equipment every 12 months.
 - (ii) The permittee must inspect and maintain each baghouse according to the requirements in paragraphs (2)(ii)(A) and (B) of this condition.
 - (A) The permittee must conduct weekly visual inspections of the system ductwork for leaks.
 - (B) The permittee must conduct inspections of the interior of the baghouse for structural integrity and to determine the condition of the fabric filter every 12 months.
- (3) As an alternative to the monitoring activities in paragraph (2) of this condition, the permittee may demonstrate compliance by:
 - (i) Conducting a daily 30-minute visible emissions (VE) test (i.e., no visible emissions) using EPA Method 22 (40 CFR part 60, appendix A-7); or
 - (ii) Using an approved alternative monitoring technique under 40 CFR §63.8(f).
- **E3-15.** Pursuant to 40 CFR §63.11440(c), if the results of the visual inspection, VE test, or alternative monitoring technique conducted under **Condition E3-14** indicate an exceedance, the permittee must take corrective action according to the equipment manufacturer's specifications or instructions.
- E3-16. Pursuant to 40 CFR §63.11440(d), the permittee must maintain records of the permittee's monitoring activities described in Conditions E3-13, E3-14, and E3-15. The permittee may use the facility's existing operating permit documentation to meet the monitoring requirements if it includes, but is not limited to, the monitoring records listed in paragraphs (1) through (5) of this condition related to any kiln peak temperature checks, visual inspections, VE tests, or alternative monitoring:
 - (1) The date, place, and time;
 - (2) Person conducting the activity;
 - (3) Technique or method used;
 - (4) Operating conditions during the activity; and
 - (5) Results.

E3-17. Pursuant to 40 CFR §63.11442(a), the permittee must keep the records specified in paragraphs (1) and (2) of this condition.

- (1) A copy of each notification that was submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status that was submitted, according to the requirements in 40 CFR §63.10(b)(2)(xiv).
- (2) Records of all required measurements needed to document compliance with management practices as required in 40 CFR §63.10(b)(2)(vii), including records of monitoring and inspection data required by **Conditions E3-13**, **E3-14**, **E3-15**, and **E3-16**.

Pursuant to 40 CFR §63.11442(b), the records must be in a form suitable and readily available for expeditious review, according to 40 CFR §63.10(b)(1). Pursuant to 40 CFR §63.11442(c), as specified in 40 CFR §63.10(b)(1), the permittee must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. Pursuant to 40 CFR §63.11442(d), the permittee must keep each record onsite for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR §63.10(b)(1). The permittee may keep the records offsite for the remaining three years.

E3-18. Identification of Responsible Official, Technical Contact, and Billing Contact

- a) The application that was utilized in the preparation of this permit is dated March 23, 2015, and signed by Arrigo Zapparoli, President and CEO of the permitted facility. If this person terminates his/her employment or is assigned different duties such that he/she is no longer a Responsible Official for this facility as defined in part 1200-03-09-.02(11)(b)21 of the Tennessee Air Pollution Control Regulations, the owner or operator of this air contaminant source shall notify the Technical Secretary of the change. Said notification must be in writing and must be submitted within thirty (30) days of the change. The notification shall include the name and title of the new Responsible Official and certification of truth and accuracy. All representations, agreement to terms and conditions, and covenants made by the former Responsible Official that were used in the establishment of the permit terms and conditions will continue to be binding on the facility until such time that a revision to this permit is obtained that would change said representations, agreements, and/or covenants. In a letter dated August 23, 2011, Michael Mathys, Secretary, was also identified as a Responsible Official.
- b) The application that was utilized in the preparation of this permit is dated March 23, 2015, and identifies Don Haynes as the Principal Technical Contact for the permitted facility. If this person terminates his/her employment or is assigned different duties such that he/she is no longer the Principal Technical Contact for this facility, the owner or operator of this air contaminant source shall notify the Technical Secretary of the change. Said notification must be in writing and must be submitted within thirty (30) days of the change. The notification shall include the name and title of the new Principal Technical Contact and certification of truth and accuracy.
- c) The application that was utilized in the preparation of this permit is dated March 23, 2015, and identifies Don Haynes as the Billing Contact for the permitted facility. If this person terminates his/her employment or is assigned different duties such that he/she is no longer the Billing Contact for this facility, the owner or operator of this air contaminant source shall notify the Technical Secretary of the change. Said notification must be in writing and must be submitted within thirty (30) days of the change. The notification shall include the name and title of the new Billing Contact and certification of truth and accuracy.

63-0135-02 Raw Material Storage, Body Preparation, Three Spray Dryers.

Raw materials are stored indoors in concrete walled bays, are delivered via truck and are loaded into process hoppers by means of a rubber tired loader. The incoming material is generally coarse with some retained moisture preventing the material from becoming airborne. Water is used to wet the piles and travel areas as needed to prevent the generation of airborne dust primarily during extended hot, dry periods. Body preparation consists, in part, of wet ball mills, belt conveyor transitions, and prill storage silos. The various dry materials that make up the body of the tile are loaded into ball mills with water to be ground to size and thoroughly mixed. The resultant slurry is referred to as slip. Two baghouses are used for control in body preparation. The final production step in body preparation is spray drying where slip is pumped through high pressure nozzles and atomized into the spray dryer chamber in a direction countercurrent to the flow of hot air from a duct burner. This causes rapid desiccation of the slip resulting in a dried, coarse powder referred to as prill. The prill stored in silos and then moved to the presses via belt conveyors. Three wet scrubbers are used for control in spray drying. The spray dryers are subject to 40 CFR 60, subpart UUU (NSPS).

Conditions E4-1 through E4-12 apply to source 63-0135-02

Raw Material Storage, Body Preparation Area 1, and Body Preparation Area 2. Conditions E4-1 through E4-3 apply to Raw Material Storage, Body Preparation Area 1, and Body Preparation Area 2

- **E4-1.** Wet suppression must be applied to the indoor bins in the raw material storage building as necessary to comply with the standards in this permit. The wet suppression system shall be maintained in good working condition in order to provide sufficient water pressure and water flow to effectively control fugitive emissions.
- **E4-2.** Particulate matter (PM) emitted from the raw material storage, Body Preparation Area 1, and Body Preparation Area 2 shall not exceed 3.6 pounds per hour.

TAPCR 1200-03-07-.01(5); Agreement letter dated February 2, 2016

Compliance Method: The permittee shall assure compliance with the particulate matter emission limitation by keeping the pressure drop across the baghouse equal to or above the values listed in the table below:

Identification Number	Minimum Pressure Drop (inches of water)
Raw Material Storage Building	TBD
Body Preparation Area 1	1.8
Body Preparation Area 2	1.2

The pressure drop for each baghouse shall be recorded once daily when the source is in operation. The days when the source does not operate shall be noted. For lower pressure drop reading(s) resulting from replacement of bags, the permittee shall record the deviation(s) as such in their daily records. Due allowance will be made for lower pressure drop reading(s) which follow replacement of bags provided the permittee establishes to the satisfaction of the Technical Secretary that these lower readings resulted from the replacement of bags.

Baghouse for Raw Material Storage Building

Within 10 days of baghouse startup, the permittee shall begin taking daily pressure drop readings for the new baghouses. Sixty (60) days of pressure drop (inches of water column) readings for the baghouses shall be compiled. The designated person(s) shall note any relevant baghouse conditions/problems/concerns when recording the values. This data shall be submitted to the Division, along with a proposed minimum pressure drop for the baghouses, no later than 15 days following the 60 days of readings. The minimum pressure drop value for compliance assurance will be incorporated into this permit through an administrative permit amendment.

After incorporation of the minimum pressure drop into the permit, compliance with the above specified particulate emission limit shall be assured by maintaining the required minimum pressure drop for the baghouse. The pressure drop for the baghouse shall be recorded once daily when the source is in operation. Days when the source is not operating shall be noted.

E4-3. Visible emissions from raw material baghouse and body preparation operations baghouses shall not exhibit greater than ten percent (10%) opacity, except for one (1) six-minute period in any one (1) hour period, and for no more than four (4) six-minute periods in any twenty-four (24) hour period. Visible emissions from this source shall be determined by EPA Method 9, as published in the current 40 CFR 60, Appendix A (six-minute average).

TAPCR 1200-03-05-.03(6) and TAPCR 1200-03-05-.01(3). Agreement letter dated February 2, 2016

Compliance Method: The permittee shall assure compliance with the opacity standard by utilizing the opacity matrix dated June 18, 1996 that is enclosed as Attachment 2.

If the magnitude and frequency of excursions reported by the permittee in the periodic monitoring for emissions is unsatisfactory to the Technical Secretary, this permit may be reopened to impose additional opacity monitoring requirements.

Spray Dryers #1, #2, and #3. Conditions E4-4 through E4-12 apply to Spray Dryers #1, #2, and #3

- **E4-4.** Spray Dryer #1 shall not exceed a maximum heat input capacity of 24.6 million btu per hour. Spray Dryer #2 shall not exceed a maximum heat input capacity of 30.4 million Btu per hour. Spray Dryer #3 shall not exceed a maximum heat input capacity of 30.4 million Btu per hour. The Technical Secretary may require proof of compliance with this condition.
- **E4-5.** Only natural gas and propane shall be used as fuels for Spray Dryers #1, #2, and #3. The Technical Secretary may require proof of compliance with this condition.
- **E4-6.** Particulate matter (PM) emitted from Spray Dryers #1, #2, and #3 shall not exceed 0.015 grains per dry standard cubic foot of effluent gas (8.39 pounds per hour, combined total).

TAPCR 1200-03-07-.01(5) - Letter of agreement dated February 2, 2016

Compliance Method: Spray Dryers #1, #2, and #3 shall not operate without the use of an air pollution control device (venturi wet scrubber), except in accordance with TAPC Rule 1200-03-20. The permittee shall install, calibrate, maintain and operate monitoring devices that continuously measure and record the pressure loss of the gas stream through the scrubber and scrubber liquid flow rate. The monitoring devices must be certified by the manufacturer to be accurate within 5 percent of both water column gauge pressure at the level of operation and the design scrubbing liquid flow rate. The permittee shall record the arithmetic average over a 2-hour period, from the recordings of the monitoring devices, of both the change in pressure of the gas stream across the scrubber and the flow rate of the scrubbing liquid. Deviating from the range of allowed parameters shall be deemed an excursion.

Spray Dryer #1

The permittee shall assure compliance with the particulate matter limit by operating the wet scrubber at a flow rate of 239.9 (from performance test) gallons per minute (GPM) \pm 20% (191.4 – 287; GPM). The minimum pressure drop measured across the scrubber was 7.6 (January 8-9, 1996 performance test) inches of water. 40 CFR 60.735 (2) allows a deviation of (-) 10% from the average value recorded during the performance test. Therefore the allowable minimum pressure drop shall be established as 6.8 inches of water. These values were recorded during the most recent performance test that demonstrated compliance with an exhaust emission standard of 0.015 grains per dry standard cubic foot.

Spray Dryer #2

The permittee shall assure compliance with the particulate matter limit by operating the wet scrubber at a flow rate of 127.2 (from performance test) gallons per minute (GPM) \pm 20% (101.8 - 152.6; GPM). The minimum pressure drop measured across the scrubber was 5.6 (September 12, 1997 performance test) inches of water. 40 CFR 60.735(c)(2) allows a deviation of (-) 10% from the average value recorded during the performance test. Therefore the allowable minimum pressure drop shall be established as 5.0 inches of water. These values were recorded during the most recent performance test that demonstrated compliance with an exhaust emission standard of 0.015 grains per dry standard cubic foot.

Spray Dryer #3

The permittee shall assure compliance with the particulate matter limit by operating the wet scrubber at a flow rate of 119.5 (from performance test and correction letter dated June 3, 2004 received after the public notice comment period) gallons per minute (GPM) \pm 20% (95.6 – 143.4; GPM). The minimum pressure drop measured across the scrubber is 6.2 (September 12, 1997 performance test) inches of water. 40 CFR 60.735 (c)(2) allows a deviation of (-) 10% from the average value recorded during the performance test. Therefore the allowable minimum pressure drop shall be established as 5.6 inches of water. These values were recorded during the most recent performance test that demonstrated compliance with an exhaust emission standard of 0.015 grains per dry standard cubic foot.

E4-7. Sulfur dioxide emitted from Spray Dryers #1, #2, and #3 shall not exceed 0.40 tons during all intervals of 12 consecutive months.

TAPCR 1200-03-14-.03(5)

Compliance Method: The potential to emit sulfur dioxide from this source is less than five tons per year. In accordance with TAPCR 1200-3-9-.04(5)(c)3. and by annual certification of compliance, the permittee shall be considered to meet the monitoring and related recordkeeping and reporting requirements of TAPCR 1200-03-09-.02(11)(e)3.(i). The permittee shall submit annually a compliance certification for sulfur dioxide from this source (63-0135-02).

E4-8. Volatile organic compounds (VOC) emitted from Spray Dryers #1, #2, and #3 shall not exceed 2.1 tons during all intervals of 12 consecutive months.

TAPCR 1200-03-07-.07(2)

Compliance Method: The potential to emit VOC's from this source is less than five tons per year. In accordance with TAPCR 1200-3-9-.04(5)(c)3. and by annual certification of compliance, the permittee shall be considered to meet the monitoring and related recordkeeping and reporting requirements of TAPCR 1200-03-09-.02(11)(e)3.(i). The permittee shall submit annually a compliance certification for VOC's from this source (63-0135-02).

E4-9. Carbon monoxide (CO) emitted from Spray Dryers #1, #2, and #3 shall not exceed 30.9 tons during all intervals of 12 consecutive months.

TAPCR 1200-03-07-.07(2)

Compliance Method: The permittee shall assure compliance with this emission limitation by assuring compliance with **Condition E4-4.** Compliance with this emission limitation is based on the maximum heat input capacity of 85.4 million btu per hour and the emission factor of 84 pounds of CO per million cubic feet as published in Section 1.4 of AP-42.

E4-10. Nitrogen oxides (NO_x) emitted from Spray Dryers #1, #2, and #3 shall not exceed 52.99 tons during all intervals of 12 consecutive months.

TAPCR 1200-03-07-.07(2)

Compliance Method: The permittee shall assure compliance with this emission limitation by assuring compliance with **Condition E4-4.** Compliance with this emission limitation is based on the maximum heat input capacity of 85.4 million btu per hour and the emission factor of 100 pounds of NO_x per million cubic feet as published in Section 1.4 of AP-42.

E4-11. The exhaust gases from Spray Dryer #2 shall be discharged unobstructed vertically upwards to the ambient air from a stack with an exit diameter of 44.4 inches not less than 104 feet above ground. The exhaust gases from Spray Dryer #3 shall be discharged unobstructed vertically upwards to the ambient air from a stack with an exit diameter of 44.4 inches not less than 104 feet above ground.

TAPCR 1200-03-03-.03

E4-12. Visible emissions from Spray Dryers #1, #2, and #3 shall not exceed twenty (20) percent opacity pursuant to the New Source Performance Standard (NSPS) 40 CFR 60, Subpart UUU, CFR §60.732(b). Visible emissions from this source shall be determined by EPA Method 9, as published in the current 40 CFR 60, Appendix A (six-minute average).

Compliance Method: The permittee shall assure compliance with the opacity standard by utilizing the opacity matrix dated June 18, 1996 that is enclosed as Attachment 2.

If the magnitude and frequency of excursions reported by the permittee in the periodic monitoring for emissions is unsatisfactory to the Technical Secretary, this permit may be reopened to impose additional opacity monitoring requirements.

63-0135-04 Tile Presses #1, #2, #3, #9, #10, #26, #27, #28, Prill Conveyor System and Press Loading Operation.

Prill is delivered to the presses via a series of augers, belt conveyor and pneumatic systems. Tile is initially formed in the presses where prill is loaded into molds, and then exposed to tremendous pressure to form greenware. The unfired tiles are then transported via a conveyor to the vertical dryers. Five baghouses are used for control.

Conditions E5-1 through E5-2 apply to source 63-0135-04

E5-1. Particulate matter (PM) emitted from this source (63-0135-04) shall not exceed 5.81 pounds per hour.

TAPCR 1200-03-07-.01(5); Agreement letter dated February 2, 2016

Compliance Method: The permittee shall assure compliance with the particulate matter emission limitation by keeping the pressure drop across the baghouse equal to or above the values listed in the table below:

Identification Number	Minimum Pressure Drop (inches of water)
Press loading	2.2
Presses 1, 2, 3	2.0
Press loading for Presses 1, 2, 3	2.1
Presses 9, 10 and Prill Conveyor System	2.4
Presses 26, 27, 28	1.8

The pressure drop for each baghouse shall be recorded once daily when the source is in operation. The days when the source does not operate shall be noted. For lower pressure drop reading(s) resulting from replacement of bags, the permittee shall record the deviation(s) as such in their daily records. Due allowance will be made for lower pressure drop reading(s) which follow replacement of bags provided the permittee establishes to the satisfaction of the Technical Secretary that these lower readings resulted from the replacement of bags.

E5-2. Visible emissions from this source (63-0135-04) shall not exhibit greater than ten percent (10%) opacity, except for one (1) six-minute period in any one (1) hour period, and for no more than four (4) six-minute periods in any twenty-four (24) hour period. Visible emissions from this source shall be determined by EPA Method 9, as published in the current 40 CFR 60, Appendix A (six-minute average).

TAPCR 1200-03-05-.01(3); Agreement letter dated February 2, 2016

Compliance Method: The permittee shall assure compliance with the opacity standard by utilizing the opacity matrix dated June 18, 1996 that is enclosed as Attachment 2.

If the magnitude and frequency of excursions reported by the permittee in the periodic monitoring for emissions is unsatisfactory to the Technical Secretary, this permit may be reopened to impose additional opacity monitoring requirements.

63-0135-05 Glaze Batching.

Glazes are prepared and batched for use on glazing lines. This includes mixing dry glaze powders and various colorants with water to form batches of glaze with the desired properties of color, sheen, coefficient of friction, etc. A baghouse is used for control.

Conditions E6-1 through E6-2 apply to source 63-0135-05

E6-1. Particulate matter (PM) emitted from this source (63-0135-05) shall not exceed 0.4 pounds per hour.

TAPCR 1200-3-7-.01(5); Letter of agreement dated September 28, 2001.

Compliance Method: The permittee shall assure compliance with the particulate matter emission limitation by keeping the pressure drop across the baghouse equal to or above the 1.4 inches of water. The pressure drop for the baghouse shall be recorded once daily when the source is in operation. The days when the source does not operate shall be noted. For lower pressure drop reading(s) resulting from replacement of bags, the permittee shall record the deviation(s) as such in their daily records. Due allowance will be made for lower pressure drop reading(s) which follow replacement of bags provided the permittee establishes to the satisfaction of the Technical Secretary that these lower readings resulted from the replacement of bags.

E6-2. Visible emissions from this source (63-0135-05) shall not exhibit greater than ten percent (10%) opacity, except for one (1) six-minute period in any one (1) hour period, and for no more than four (4) six-minute periods in any twenty-four (24) hour period. Visible emissions from this source shall be determined by EPA Method 9, as published in the current 40 CFR 60, Appendix A (six-minute average).

TAPCR 1200-3-5-.01(3); Letter of agreement dated September 28, 2001.

Compliance Method: The permittee shall assure compliance with the opacity standard by utilizing the opacity matrix dated June 18, 1996 that is enclosed as Attachment 2.

If the magnitude and frequency of excursions reported by the permittee in the periodic monitoring for emissions is unsatisfactory to the Technical Secretary, this permit may be reopened to impose additional opacity monitoring requirements.

63-0135-08 Glaze Lines #1, #2, #3, #9, #10, #26, #27, #28 and Eight Ink Jet Printers.

Greenware exits the vertical dryers and enters the glaze lines where a variety of tools are employed to apply glaze and achieve the desired effects. Several glaze application methods are employed including, but not limited to, roller application, spray atomization, etc. Glazed greenware is then moved in transport racks either to intermediate storage or directly to the tile kilns. This source consists of eight glaze lines and eight ink jet printers. Three baghouses are used for control.

Conditions E7-1 through E7-3 apply to source 63-0135-08

E7-1. Particulate matter (PM) emitted from this source (63-0135-08) shall not exceed 3.54 pounds per hour.

TAPCR 1200-3-7-.01(5); Agreement letter dated February 2, 2016

Compliance Method: The permittee shall assure compliance with the particulate matter emission limitation by keeping the pressure drop across the baghouse equal to or above the values listed in the table below:

Identification Number	Minimum Pressure Drop (inches of water)
Lines 1, 2, 3	2.0
Lines 9, 10	1.0
Lines 26, 27, 28	1.6

The pressure drop for each baghouse shall be recorded once daily when the source is in operation. The days when the source does not operate shall be noted. For lower pressure drop reading(s) resulting from replacement of bags, the permittee shall record the deviation(s) as such in their daily records. Due allowance will be made for lower pressure drop reading(s) which follow replacement of bags provided the permittee establishes to the satisfaction of the Technical Secretary that these lower readings resulted from the replacement of bags.

E7-2. Volatile organic compounds (VOC's) emitted from this source (63-0135-08) shall not exceed 30.0 tons during all intervals of 12 consecutive months. Hazardous air pollutants (HAP's) emitted from this source shall not exceed 9.0 tons during all intervals of 12 consecutive months.

TAPCR 1200-03-07-.07(2)

Compliance Method: Compliance with this emission limitation shall be assured through recordkeeping of material usage rates. Record keeping of volatile organic compounds and hazardous air pollutants for compliance for this facility shall include a log of the following information: (1) Emissions in tons of each Hazardous Air Pollutant, (2) Emissions in tons of all Hazardous Air Pollutants and (3) Emissions in tons of VOCs excluding water and/or exempt compounds for all input materials used during all intervals of 12 consecutive months.

The as-supplied VOC content of all VOC-containing materials (all coatings, inks, adhesives, thinners, and solvents) used by this facility shall be determined from Material Safety Data Sheets (MSDS), Certified Product Data Sheets (CPDS), or manufacturer/vendor formulation data which explicitly list the VOC content by weight. The results of these determinations shall be recorded in the following log. If new materials are used, or if material formulation is changed, the log shall be updated within 90 days from the initial date of usage of the new or altered material.

A log of information in the following format or equivalent format (along with the CPDS's, MSDS's and a record of purchase orders and invoices for all VOC and HAP containing materials) must be maintained at the source location.

MONTHLY VOC/HAP EMISSIONS LOG

MONTH:

Material Name	Usage (gal/mon or lb/mon)	VOC Content (pounds VOC per gallon or pounds VOC per pound coating)	VOC Emissions (tons VOC per month)	HAP ₁ Content (pounds HAP ₁ per gallon)	HAP ₁ Emissions (tons HAP ₁ per month)	HAP _p Content (pounds HAP _p per gallon)	HAP _p Emissions (tons HAP _p per month)	Total HAP Emissions (tons HAP ₁ thru HAP _p per month)
Material ₁								
Material ₂								
Material _i								
TOTAL								

Note: i = 1, 2, 3,..... n = the number of different materials, and p = 1, 2, 3,..... n = the number of different hazardous air pollutants. Use columns as required for the number of different hazardous air pollutants.

YEARLY VOC/HAP EMISSIONS LOG

Month, Year	VOC Emissions (tons VOC per month)	(*)VOC Emissions (tons VOC per 12 months)	HAP ₁ Emissions (tons HAP ₁ per month)	(*)HAP ₁ Emissions (tons HAP ₁ per 12 months)	HAP _p Emissions (tons HAP _p per month)	(*)HAP _p Emissions (tons HAP _p per 12 months)	Total HAP Emissions (tons HAP ₁ through HAP _p per month)	(*)Total HAP Emissions (tons HAP ₁ through HAP _p per 12 months)
January, Year								
February, Year								
etc.								

^(*) The Tons per 12 Month value is the sum of the VOC (or HAP) emissions in the 11 months preceding the month just completed + the VOC (or HAP) emissions in the month just completed.

E7-3. Visible emissions from this source (63-0135-08) shall not exhibit greater than ten percent (10%) opacity, except for one (1) six-minute period in any one (1) hour period, and for no more than four (4) six-minute periods in any twenty-four (24) hour period. Visible emissions from this source shall be determined by EPA Method 9, as published in the current 40 CFR 60, Appendix A (six-minute average).

TAPCR 1200-03-05-.01(3); Agreement letter dated February 2, 2016

Compliance Method: The permittee shall assure compliance with the opacity standard by utilizing the opacity matrix dated June 18, 1996 that is enclosed as Attachment 2.

If the magnitude and frequency of excursions reported by the permittee in the periodic monitoring for emissions is unsatisfactory to the Technical Secretary, this permit may be reopened to impose additional opacity monitoring requirements.

63-0135-09

Tile Kilns #6, #7, #8 and #9. This source fires greenware in 4 tile kilns. There are two baghouses with sorbent-injection used for pollution control. Baghouse A49 controls Tile Kilns #6 and #7, and Baghouse A48 controls Tile Kilns #8 and #9.

Conditions E8-1 through E8-14 apply to source 63-0135-09

E8-1. The maximum material input rate for this source shall not exceed 53,620 pounds per hour of glazed ceramic tile greenware in total (dry basis).

TAPCR 1200-03-10-.04(2)

Compliance Method: The permittee shall assure compliance with this limitation by calculating the daily average material input rate. The permittee shall maintain a log of the daily material input, operating hours, and daily average material input rate.

Daily Average Material Input Rate

Date	Material Input (lb)	Operating Hours (hours)	Daily Average Material Input Rate (lb/hr)
1			
2			
3			
Etc.			
30			
31			

The following equation shall be used to calculate the daily average material input rate:

Daily Average Material Input Rate (lb/hr) = Material Input (lb/day)

Operating Hours (hours/day)

- **E8-2.** The stated design heat input capacity for this source is 31.2 million British Thermal Units per hour (MMBtu/hr). The
 - Technical Secretary may require the permittee to prove compliance with this rate.
- **E8-3.** Only natural gas and propane shall be used as fuels for this source.
- **E8-4.** Particulate matter (PM) emitted from each kiln shall not exceed 0.2 pounds per hour (0.8 pounds per hour total for all four kilns).

TAPCR 1200-03-26-.02; Letter of agreement dated October 1, 1999

Baghouse A49 controlling Kilns #6 and 7

Compliance Method: The permittee shall assure compliance with this emission limitation by maintaining a baghouse pressure drop equal to or above 4.0 inches of water across the baghouse (A49). The pressure drop for the baghouse shall be recorded once daily when the source is in operation. Days when the source is not operating shall be noted.

Baghouse A48 controlling Kilns #8 and 9

Compliance Method: The permittee shall assure compliance with this emission limitation by maintaining a baghouse pressure drop equal to or above 4.0 inches of water across the baghouse (A48). The pressure drop for the baghouse shall be recorded once daily when the source is in operation. Days when the source is not operating shall be noted.

For lower pressure drop reading(s) resulting from replacement of bags, the permittee shall record the deviation(s) as such in their daily records. Due allowance will be made for lower pressure drop reading(s) which follow replacement of bags provided the permittee establishes to the satisfaction of the Technical Secretary that these lower readings resulted from the replacement of bags.

Compliance with the above specified particulate emission limit shall be assured by maintaining the required minimum pressure drop for the baghouse. The pressure drop for the baghouse shall be recorded once daily when the source is in operation. Days when the source is not operating shall be noted.

E8-5. Sulfur dioxide emitted from this source (63-0135-09) shall not exceed 16.0 pounds per hour.

TAPCR 1200-03-26-.02; Letter of agreement dated October 1, 1999

Compliance Method: The permittee shall assure compliance with this limitation by maintaining the sorbent feed rate to each baghouse equal to or above the rates in paragraph (1) or (2) below:

- (1) Hydrated lime feed rate to each baghouse equal to or above 8.6 pounds per hour and the sodium bicarbonate feed rate to each baghouse equal to or above 50.5 pounds per hour,
- (2) Sorbacal SPS (or equivalent hydrated lime sorbent) feed rate to each baghouse equal to or above 86.0 pounds per hour.

The permittee shall manually check the sorbent feed rates to each baghouse once per day and record the values in a log. Days when the source is not operating shall be noted. The permittee shall maintain free-flowing sorbent in the feed hopper or silo and to each baghouse at all times. The permittee shall maintain the feeder setting at or above the levels listed above. The permittee shall inspect the sorbent injection system once daily and record the results of the inspection in a log. The permittee shall promptly correct any problems with the sorbent injection system.

E8-6. Volatile Organic Compounds (VOC) emitted from this source (63-0135-09) shall not exceed 11.5 pounds per hour.

TAPCR 1200-03-07-.07(2)

Compliance Method: Compliance with this condition is assured based on compliance with **Condition E8-1**, and an emission factor of 0.43 pounds of VOC per ton of ceramic product produced (from AP-42, Table 11.7-2, published July 1996).

E8-7. Nitrogen oxides (NOx) emitted from this source (63-0135-09) shall not exceed 8.6 pounds per hour.

TAPCR 1200-03-07-.07(2)

Compliance Method: Compliance with this condition is assured based on compliance with **Condition E8-1**, and a source test performed on a kiln in November 1998 referenced in the Title V permit application.

E8-8. Carbon monoxide (CO) emitted from this source (63-0135-09) shall not exceed 34.0 pounds per hour.

TAPCR 1200-03-07-.07(2)

Compliance Method: Compliance with this condition is assured based on compliance with **Condition E8-1**, and a source test performed on Kilns 6 and 7 on February 25, 2014.

E8-9. Hydrogen fluoride (HF) emitted from this source (63-0135-09) shall not exceed 0.62 pounds per hour.

TAPCR 1200-03-07-.07(2)

Compliance Method: The permittee shall assure compliance with this limitation by the compliance method specified in **Condition E8-5**.

E8-10. Hydrogen chloride (HCl) emitted from this source (63-0135-09) shall not exceed 1.0 pound per hour and 4.38 tons during all intervals of 12 consecutive months.

TAPCR 1200-03-07-.01(5); Agreement letter dated February 12, 2015.

Compliance Method: The permittee shall assure compliance with this limitation by the compliance method specified in **Condition E8-5**.

E8-11. Sulfuric acid (H₂SO₄) emitted from this source (63-0135-09) shall not exceed 0.85 pounds per hour.

TAPCR 1200-03-07-.07(2)

Compliance Method: Compliance with this condition is assured based on compliance with **Condition E8-1**, and a source test performed on a kiln in November 1998 referenced in the Title V permit application.

E8-12. Visible emissions from this source (63-0135-09) shall not exceed ten (10) percent opacity. Visible emissions from this source shall be determined by EPA Method 9, as published in the current 40 CFR 60, Appendix A (six-minute average).

TAPCR 1200-03-05-.01(3) – Letter of agreement dated October 1, 1999

Compliance Method: The permittee shall assure compliance with the opacity standard by utilizing the opacity matrix dated June 18, 1996 that is enclosed as Attachment 2.

E8-13. This source (63-0135-09) is subject to 40 CFR Part 64-Compliance Assurance Monitoring (CAM) for hydrogen flouride, hydrogen chloride, and sulfur dioxide. The following table summarizes the CAM requirements:

Monitoring Element	Indicator	Indicator
Indicator	Sorbent feed rate	Baghouse pressure drop.
Measurement Approach	The permittee will determine the feed rates by noting feeder setting and measuring the output of the feeder system by disconnecting the feeder hose from the pump and discharging material to a pre-weighted container over a predetermined duration. The permittee will then measure the weight of the resultant material and extrapolate the dry sorbent feed rate over time.	The permittee shall measure the pressure drop across each baghouse once daily
Indicator Range	The permittee shall maintain the sorbent feed rate to each baghouse equal to or above the sorbent feed rates specified in condition E8-5	The permittee shall maintain the pressure drop across each baghouse equal to or above the pressure drop specified in condition E8-4 .
Data Representativeness	The permittee will measure the sorbent feed rates to each baghouse unit at the junction of the auger and pneumatic suction feed hose.	Magnahelic gauges positioned at inlet and outlet of baghouse, installed by authorized equipment representative.
Verification of Operational Status	The permittee shall inspect the sorbent injection systems once daily and record the results of the inspection in a log. The permittee shall promptly correct any problems with the sorbent injection system.	Not applicable.
QA/QC Practices and Criteria	Sorbent feed equipment is calibrated, maintained, and operated in accordance with manufacturer's instructions. All equipment is inspected per facility preventive maintenance practices.	Instrumentation is calibrated, maintained, and operated in accordance with manufacturer's instructions. All equipment is inspected per facility preventive maintenance practices.
Monitoring Frequency and Data Collection Procedures	The sorbent feed rates to each baghouse shall be measured once per day and recorded in a suitable format (log) that shall be maintained on-site, and made available for inspection.	Pressure drop shall be measured once per day and recorded in a suitable format (log) that shall be maintained on-site, and made available for review.
Averaging Period	No average is taken.	No average is taken.
Minimum Data Availability Requirement	Not applicable.	Not applicable.

E8-14. The permittee may change the sorbents and/or the sorbent feed rates in **Condition E8-5 and E8-13** by utilizing the following procedure:

- a) The permittee shall notify the Technical Secretary in writing in advance of the permittee's intent to conduct pilot testing of the new sorbent and/or sorbent feed rate for this source. This notice shall identify the proposed new sorbent and may be submitted as confidential and proprietary.
- b) The permittee shall conduct pilot testing based on reasonably available information, including past experience at the facility with permitted sorbents and sorbent feed rates, stoichiometry, applications deemed similar by the permittee, and vendor written specifications. During pilot testing, the permittee shall abide by the new sorbent feed rates instead of the limits in Condition E8-5 and E8-13.
- c) If the permittee decides to permanently change the sorbents and/or sorbent feed rates in **Condition E8-5 and E8-13**, then the permittee shall abide by the new sorbent feed rates until the new sorbent feed rates are incorporated into the permit via a minor permit modification as described in paragraph (g) of this condition.
- d) If the permittee decides to permanently change the sorbents and/or sorbent feed rates in **Condition E8-5 and E8-13**, then the permittee shall conduct an emission performance test for Hydrogen Fluoride, Hydrogen Chloride, and Sulfur Dioxide. Within 180 days after permanently changing the sorbents and/or sorbent feed rates, the permittee shall furnish the Technical Secretary a written report of the results of an emissions performance test for Hydrogen Fluoride, Hydrogen Chloride, and Sulfur Dioxide, which will demonstrate compliance with the emission limitations specified in **Conditions E8-5, E8-9, and E8-10** of this permit. The performance test shall be conducted and data reduced in accordance with methods and procedures specified in the following regulations:
 - For Hydrogen Fluoride and Hydrogen Chloride Method 26A of 40 CFR part 60, Appendix A
 - b) For Sulfur Dioxide Method 6 of 40 CFR part 60, Appendix A.
- e) At least thirty (30) days prior to conducting the emission performance test, the Division's Compliance Validation Program shall be contacted at (615) 532-0554, in order to afford the Division the opportunity to have an observer present. The source owner or operator shall provide sampling ports and a suitable platform for the conducting of source emissions testing on the effluent gas stream of the source.
- f) At least sixty (60) days prior to conducting the emissions performance test, the permittee shall submit a test protocol to the Technical Secretary for approval. To be considered as being approvable the protocol must address the following:
 - 1) Address the operational level of the kilns during the testing period and how that operational level will represent the maximum normal operating level of the kilns.
 - 2) How process samples will be taken during the testing period and analyzed for chloride and fluoride content.
 - 3) Identify the type of sorbent to be used during the test and during operation.
 - 4) How the sorbent feed rate to the baghouse will be measured during the testing period. The sorbent feed rate limit will be based on the rate measured during the testing period. The sorbent feed rate will be used as part of the compliance method for demonstrating continual compliance with the applicable hydrogen chloride, hydrogen fluoride, and sulfur dioxide emission limits.
- g) Within 30 days of submitting a written report of the results of an emissions performance test, the permittee shall submit a minor permit modification to incorporate the new sorbents and/or sorbent feed rate into **Condition E8-5 and E8-13**. The permittee shall propose a new sorbents and/or sorbent feed rate based on the test results.

63-0135-30 Tile Kilns #1 and #22. This source fires greenware in two tile kilns. There is one sorbent-injected baghouse.

Conditions E9-1 through E9-16 apply to source 63-0135-30

E9-1. The maximum material input rate for this source shall not exceed the amount given in the Confidential Information dated November 21, 2014, on a daily average basis.

TAPCR 1200-03-10-.04(2)

Compliance Method: The permittee shall assure compliance with this limitation by calculating the daily average material input rate. The permittee shall maintain a log of the daily material input, operating hours, and daily average material input rate.

Daily Average Material Input Rate

Date	Material Input (lb)	Operating Hours (hours)	Daily Average Material Input Rate (lb/hr)
1			
2			
3			
Etc.			
30			
31			

The following equation shall be used to calculate the daily average material input rate:

Daily Average Material Input Rate (lb/hr) = Material Input (lb/day)

Operating Hours (hours/day)

- **E9-2.** The stated design heat input capacity for Kiln #1 is 23.0 million British Thermal Units per hour (MMBtu/hr). The stated design heat input capacity for Kiln #22 is 22.6 million British Thermal Units per hour (MMBtu/hr). The Technical Secretary may require the permittee to prove compliance with these rates.
- **E9-3.** Only natural gas and propane shall be used as fuels for this source.
- **E9-4.** Particulate matter (PM) emitted from this source (63-0135-30) shall not exceed 0.4 pounds per hour and 1.75 tons during all intervals of twelve consecutive months.

TAPCR 1200-03-07-.01(5); application dated February 6, 2015

Compliance Method: The permittee shall assure compliance with this emission limitation by maintaining a baghouse pressure drop equal to or above 2.5 inches of water across the baghouse. The pressure drop for the baghouse shall be recorded once daily when the source is in operation. Days when the source is not operating shall be noted.

For lower pressure drop reading(s) resulting from replacement of bags, the permittee shall record the deviation(s) as such in their daily records. Due allowance will be made for lower pressure drop reading(s) which follow replacement of bags provided the permittee establishes to the satisfaction of the Technical Secretary that these lower readings resulted from the replacement of bags.

E9-5. Sulfur dioxide emitted from this source (63-0135-30) shall not exceed 22.07 pounds per hour and 96.7 tons during all intervals of twelve consecutive months.

TAPCR 1200-03-14-.01(3); application dated February 6, 2015.

Compliance Method: The permittee shall assure compliance with this limitation by maintaining the sorbent feed rate to the baghouse equal to or above the rate in paragraph (1) below:

(1) Sorbacal SPS (or equivalent hydrated lime sorbent) feed rate to the baghouse equal to or above 88.2 pounds per hour.

The permittee shall manually check the sorbent feed rate to the baghouse once per day and record the values in a log. Days when the source is not operating shall be noted. The permittee shall maintain free-flowing sorbent in the feed hopper or silo and to the baghouse at all times. The permittee shall maintain the feeder setting at or above the levels listed above. The permittee shall inspect the sorbent injection system once daily and record the results of the inspection in a log. The permittee shall promptly correct any problems with the sorbent injection system.

E9-6. Volatile organic compounds (VOC) emitted from this source (63-0135-30) shall not exceed 9.1 pounds per hour and 39.8 tons during all intervals of twelve consecutive months.

TAPCR 1200-03-07-.07(2)

Compliance Method: Compliance with this condition is assured based on compliance with **Condition E9-1**, and an emission factor of 0.43 pounds of VOC per ton of ceramic product produced (from AP-42, Table 11.7-2, published July 1996).

E9-7. Nitrogen oxides (NO_x) emitted from this source(63-0135-30), when burning natural gas shall not exceed 6.76 pounds per hour and 29.6 tons during all intervals of twelve consecutive months. This consists of a contribution of no more than 2.28 pounds per hour of NO_x from natural gas combustion and a contribution of no more than 4.48 pounds per hour of NO_x emissions from clay.

In order to stay below the threshold for applicability of low- NO_x requirements for fuel combustion sources, the permittee has agreed that propane shall not be burned for more than 1000 hours per calendar year.

TAPCR 1200-03-07-.01(5); agreement letter dated February 12, 2015, for hourly limit of 6.76 lb/hr TAPCR 1200-03-07-.01(5); application dated February 6, 2015 for annual propane usage limit.

Compliance Method: Compliance with this condition is assured based on compliance with Conditions E9-1 and E9-2, and the following emission factors: (1) 0.32 pounds of NO_x per ton of ceramic product produced (Florim emission factor) and (2) 50 pounds of NO_x per million cubic feet of natural gas combustion (AP-42 Table 1.4-1). The permittee shall assure compliance with the operating hours limitation by maintaining a log of monthly operating hours and calendar year operating hours when burning propane.

E9-8. Carbon monoxide (CO) emitted from this source (63-0135-30) shall not exceed 13.4 pounds per hour and 58.7 tons during all intervals of twelve consecutive months.

TAPCR 1200-03-07-.07(2)

Compliance Method: Compliance with this condition is assured based on compliance with **Condition E9-1** and a source test performed on Kiln #1 on February 25, 2014.

E9-9. Hydrogen fluoride (HF) emitted from this source (63-0135-30) shall not exceed 0.5 pounds per hour and 2.2 tons during all intervals of twelve consecutive months.

TAPCR 1200-03-07-.07(2)

Compliance Method: The permittee shall assure compliance with this limitation by the compliance method specified in **Condition E9-5**.

E9-10. Hydrogen chloride (HCl) emitted from this source (63-0135-30) shall not exceed 1.22 pounds per hour and 5.34 tons during all intervals of twelve consecutive months.

TAPCR 1200-03-07-.07(2)

Compliance Method: The permittee shall assure compliance with this limitation by the compliance method specified in **Condition E9-5**.

E9-11. Sulfuric acid mist (H₂SO₄) emitted from this source (63-0135-30) shall not exceed 1.34 pounds per hour and 5.87 tons during all intervals of twelve consecutive months.

TAPCR 1200-03-07-.07(2)

Compliance Method: Compliance with this condition is assured based on compliance with Condition E25-1, and a source test performed on a kiln in November 1998 referenced in the Title V permit application.

E9-12. Visible emissions from this source shall not exhibit greater than ten percent (10%) opacity, except for one (1) six-minute period in any one (1) hour period, and for no more than four (4) six-minute periods in any twenty-four (24) hour period. Visible emissions from this source shall be determined by EPA Method 9, as published in the current 40 CFR 60, Appendix A (six-minute average).

TAPCR 1200-03-05-.01(3); application dated February 6, 2015.

Compliance Method: The permittee shall assure compliance with the opacity standard by utilizing the opacity matrix dated June 18, 1996 that is enclosed as Attachment 1.

If the magnitude and frequency of excursions reported by the permittee in the periodic monitoring for emissions is unsatisfactory to the Technical Secretary, this permit may be reopened to impose additional opacity monitoring requirements.

- **E9-13.** The Technical Secretary may require the permittee to determine the Chlorine and Fluorine content of the material input to the process.
- **E9-14.** The exhaust gases from this source (63-0135-30) shall be discharged unobstructed vertically upwards to the ambient air from a stack with an exit diameter of 42 inches not less than 49 feet above ground level. Should this source in the future increase its emission of HF and/or HCl or revise its stack parameters, the source shall be remodeled for ambient air quality.

E9-15. This source (63-0135-30) is subject to 40 CFR Part 64-Compliance Assurance Monitoring (CAM) for hydrogen flouride, hydrogen chloride, and sulfur dioxide. The following table summarizes the CAM requirements:

Monitoring Element	Indicator	Indicator
Indicator	Sorbent feed rate	Baghouse pressure drop.
Measurement Approach	The permittee will determine the feed rate by noting feeder setting and measuring the output of the feeder system by disconnecting the feeder hose from the pump and discharging material to a pre-weighted container over a predetermined duration. The permittee will then measure the weight of the resultant material and extrapolate the dry sorbent feed rate over time.	The permittee shall measure the pressure drop across each baghouse once daily
Indicator Range	The permittee shall maintain the sorbent feed rate to the baghouse equal to or above the sorbent feed rate specified in condition E9-5.	The permittee shall maintain the pressure drop across each baghouse equal to or above the pressure drop specified in condition E9-4 .
Data Representativeness	The permittee will measure the sorbent feed rate to the baghouse unit at the junction of the auger and pneumatic suction feed hose.	Magnahelic gauges positioned at inlet and outlet of baghouse, installed by authorized equipment representative.
Verification of Operational Status	The permittee shall inspect the sorbent injection system once daily and record the results of the inspection in a log. The permittee shall promptly correct any problems with the sorbent injection system.	Not applicable.
QA/QC Practices and Criteria	Sorbent feed equipment is calibrated, maintained, and operated in accordance with manufacturer's instructions. All equipment is inspected per facility preventive maintenance practices.	Instrumentation is calibrated, maintained, and operated in accordance with manufacturer's instructions. All equipment is inspected per facility preventive maintenance practices.
Monitoring Frequency and Data Collection Procedures	The sorbent feed rate to the baghouse shall be measured once per day and recorded in a suitable format (log) that shall be maintained on-site, and made available for inspection.	Pressure drop shall be measured once per day and recorded in a suitable format (log) that shall be maintained on-site, and made available for review.
Averaging Period	No average is taken.	No average is taken.
Minimum Data Availability Requirement	Not applicable.	Not applicable.

E9-16. The permittee may change the sorbent and/or the sorbent feed rates in **Condition E9-5 and E9-15** by utilizing the following procedure:

- a) The permittee shall notify the Technical Secretary in writing in advance of the permittee's intent to conduct pilot testing of the new sorbent and/or sorbent feed rate for this source. This notice shall identify the proposed new sorbent and may be submitted as confidential and proprietary.
- b) The permittee shall conduct pilot testing based on reasonably available information, including past experience at the facility with permitted sorbents and sorbent feed rates, stoichiometry, applications deemed similar by the permittee, and vendor written specifications. During pilot testing, the permittee shall abide by the new sorbent feed rates instead of the limits in **Condition E9-5 and E9-15**.
- c) If the permittee decides to permanently change the sorbents and/or sorbent feed rates in **Condition E9-5 and E9-15**, then the permittee shall abide by the new sorbent feed rates until the new sorbent feed rates are incorporated into the permit via a minor permit modification as described in paragraph (g) of this condition.
- d) If the permittee decides to permanently change the sorbents and/or sorbent feed rates in **E9-5** and **E9-15**, then the permittee shall conduct an emission performance test for Hydrogen Fluoride, Hydrogen Chloride, and Sulfur Dioxide. Within 180 days after permanently changing the sorbents and/or sorbent feed rates, the permittee shall furnish the Technical Secretary a written report of the results of an emissions performance test for Hydrogen Fluoride, Hydrogen Chloride, and Sulfur Dioxide, which will demonstrate compliance with the emission limitations specified in **Conditions E9-5**, **E9-9**, and **E9-10** of this permit. The performance test shall be conducted and data reduced in accordance with methods and procedures specified in the following regulations:
 - 1) For Hydrogen Fluoride and Hydrogen Chloride Method 26A of 40 CFR part 60, Appendix A
 - For Sulfur Dioxide Method 6 of 40 CFR part 60, Appendix A.
- e) At least thirty (30) days prior to conducting the emission performance test, the Division's Compliance Validation Program shall be contacted at (615) 532-0554, in order to afford the Division the opportunity to have an observer present. The source owner or operator shall provide sampling ports and a suitable platform for the conducting of source emissions testing on the effluent gas stream of the source.
- f) At least sixty (60) days prior to conducting the emissions performance test, the permittee shall submit a test protocol to the Technical Secretary for approval. To be considered as being approvable the protocol must address the following:
 - 1) Address the operational level of the kilns during the testing period and how that operational level will represent the maximum normal operating level of the kilns.
 - 2) How process samples will be taken during the testing period and analyzed for chloride and fluoride content.
 - 3) Identify the type of sorbent to be used during the test and during operation.
 - 4) How the sorbent feed rate to the baghouse will be measured during the testing period. The sorbent feed rate limit will be based on the rate measured during the testing period. The sorbent feed rate will be used as part of the compliance method for demonstrating continual compliance with the applicable hydrogen chloride, hydrogen fluoride, and sulfur dioxide emission limits.
- g) Within 30 days of submitting a written report of the results of an emissions performance test, the permittee shall submit a minor permit modification to incorporate the new sorbents and/or sorbent feed rate into **E9-5 and E9-15**. The permittee shall propose a new sorbents and/or sorbent feed rate based on the test results.

63-0135-32 Emergency Reciprocating Internal Combustion Engine Power Generator.

Conditions E10-1 through E10-16 apply to source 63-0135-32

E10-1. This source is subject to the Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (40 CFR Part 60, Subpart IIII). The permittee shall comply with 40 CFR Part 60, Subpart IIII upon startup.

- **E10-2.** This source is subject to the National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (40 CFR Part 63, Subpart ZZZZ). Pursuant to 40 CFR §60.6590(c), this affected source (which is a new stationary RICE located at a major source of HAP emissions) shall meet the requirements of 40 CFR 63, Subpart ZZZZ by meeting the requirements of 40 CFR 60, Subpart IIII.
- E10-3. The maximum power output for this source shall not exceed 500 kilowatts (500 kW).
- **E10-4.** On the permit application, the permittee stated that this source is used for emergency purposes. Therefore, the allowable emissions were calculated using 500 hours per year based on U.S. EPA policy.
- **E10-5.** Only No. 2 fuel oil and diesel fuel shall be used as fuels for this source.
- **E10-6.** Particulate Matter (TSP) emitted from this source shall not exceed 0.20 grams per kilowatt-hour (0.22 lb/hr).

40 CFR §60.4205(b)

Compliance Method: The permittee shall assure compliance with this emission limitation by assuring compliance with **Condition E10-15.**

E10-7. Sulfur Dioxide (SO₂) emitted from this source shall not exceed 0.01 pounds per hour.

TAPCR 1200-3-14-.03(5)

Compliance Method: The permittee shall assure compliance with this emission limitation by assuring compliance with **Condition E10-12.** Compliance with this emission limitation is based on an emission factor of 0.0000121 pounds of SO_2 per horsepower hour (EPA AP-42, Section 3.4, October 1996).

E10-8. Carbon Monoxide (CO) emitted from this source shall not exceed 3.5 grams per kilowatt-hour (3.9 lb/hr).

40 CFR §60.4205(b)

Compliance Method: The permittee shall assure compliance with this emission limitation by assuring compliance with **Condition E10-15.**

E10-9. Non-Methane Hydrocarbons and Nitrogen Oxides (NMHC + NO_X) emitted from this source shall not exceed 4.0 grams per kilowatt-hour (4.4 lb/hr).

40 CFR §60.4205(b)

Compliance Method: The permittee shall assure compliance with this emission limitation by assuring compliance with **Condition E10-15.**

- **E10-10.** Visible emissions from this source shall not exceed the following:
 - a) Twenty percent (20%) opacity during the acceleration mode;
 - b) Fifteen percent (15%) opacity during the lugging mode; and
 - c) Fifty percent (50%) opacity during the peaks in either the acceleration or lugging modes.

The engine manufacturer is responsible for testing. Opacity levels are to be measured and calculated as set forth in 40 CFR part 86, subpart I. Notwithstanding the provisions of 40 CFR part 86, subpart I, two-cylinder nonroad engines may be tested using an exhaust muffler that is representative of exhaust mufflers used with the engines in use.

40 CFR §60.4205(b); 40 CFR §60.4202(a)(2); and 40 CFR §89.113(a) and (b)

E10-11. Pursuant to 40 CFR §60.4206, the permittee must operate and maintain stationary CI ICE that achieve the emission standards as required in 40 CFR §60.4205 over the entire life of the engine.

- **E10-12.** Pursuant to 40 CFR §60.4207(b), the permittee shall use diesel fuel that meets the requirements of 40 CFR 80.510(b), as follows:
 - (1) Sulfur content shall not exceed 15 ppm maximum for nonroad diesel fuel.
 - (2) Cetane index or aromatic content, as follows:
 - (i) A minimum cetane index of 40; or
 - (ii) A maximum aromatic content of 35 volume percent.
- **E10-13.** Pursuant to 40 CFR §60.4209(a), for each emergency stationary CI internal combustion engine that does not meet the standards applicable to non-emergency engines, the permittee must install a non-resettable hour meter prior to startup of the engine.
- **E10-14.** Pursuant to 40 CFR §60.4211(a), the permittee must do all of the following, except as permitted under paragraph (4) of this condition:
 - (1) Operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's emission-related written instructions;
 - (2) Change only those emission related settings that are permitted by the manufacturer; and
 - (3) Meet the requirements of 40 CFR parts 89, 94 and/or 1068, as they apply to this source.
 - (4) If the permittee does not install, configure, operate, and maintain the engine and control device according to the manufacturer's emission-related written instructions, or the permittee changes emission related settings in a way that is not permitted by the manufacturer, the permittee must demonstrate compliance as follows:
 - (i) The permittee must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, the permittee must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after you change emission-related settings in a way that is not permitted by the manufacturer. The permittee must conduct subsequent performance testing every 8,760 hours of engine operation or 3 years, whichever comes first, thereafter to demonstrate compliance with the applicable emission standards.
- **E10-15.** The permittee shall comply with the PM, CO, and (NMHC + NOx) emission limitations by purchasing an engine certified to the emission standards in 40 CFR §60.4205(b) based on the model year and maximum engine power. The permittee shall maintain a record of this certification. The engine shall be installed and configured according to the manufacturer's emission-related specifications, except as permitted in paragraph (4) of **Condition E10-14** of this permit. 40 CFR §60.4211(c)

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E10-16. Pursuant to 40 CFR §60.4211(f), emergency stationary ICE may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. There is no time limit on the use of emergency stationary ICE in emergency situations. The permittee may petition the Technical Secretary for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the permittee maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency ICE beyond 100 hours per year. Emergency stationary ICE may operate up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply non-emergency power as part of a financial arrangement with another entity. For owners and operators of emergency engines, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as permitted in this section, is prohibited.

Compliance Method: The permittee must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The permittee must document how many hours are spent for emergency operation, maintenance checks and readiness testing, and non-emergency operation. The permittee shall calculate the operating hours for each calendar year. The permittee shall maintain the following log format or an alternative format which readily provides the same required information.

Logs for emergency stationary RICE

Month, Year	Emergency Operation (hr/mon)	Maintenance Checks and Readiness Testing (hr/mon)	Non-Emergency Operation (hr/mon)
Limit			
January			
February			
Etc.			
December			
Total for January to December			

END OF PERMIT NUMBER: 570069

ATTACHMENT 1

OPACITY MATRIX DECISION TREE for VISIBLE EMISSION EVALUATION TVEE METHOD 2

dated JUNE 18, 1996 and amended September 11, 2013

Decision Tree PM for Opacity for Sources Subject to Rule 1200-03-05-.01 Utilizing TVEE Method 2

Notes:

PM = Periodic Monitoring required by 1200-03-09-.02(11)(e)(iii).

This Decision Tree outlines the criteria by which major sources can meet the periodic monitoring and testing requirements of Title V for demonstrating compliance with the visible emission standard in Rule 1200-03-05-.01. It is not intended to determine compliance requirements for EPA's Compliance Assurance Monitoring (CAM) Rule (formerly referred to as Enhanced Monitoring – Proposed 40 CFR 64).

Examine each emission unit using this Decision Tree to determine the PMT required.

Use of continuous emission monitoring systems eliminates the need to do any additional periodic monitoring.

Visible Emission Evaluations (VEEs) are to be conducted utilizing Tennessee Visible Emission Evaluation Method 2. The observer must be properly certified according to the criteria specified in EPA Method 9 to conduct TVEE Method 2 evaluations.

Typical Pollutants Particulates, VOC, CO, SO₂, NO_x, HCl, HF, HBr, Ammonia, and Methane.

Initial observations are to be repeated within 90 days of startup of a modified source, if a new construction permit is issued for modification of the source.

A VEE conducted by TAPCD personnel after the Title V permit is issued will also constitute an initial reading.

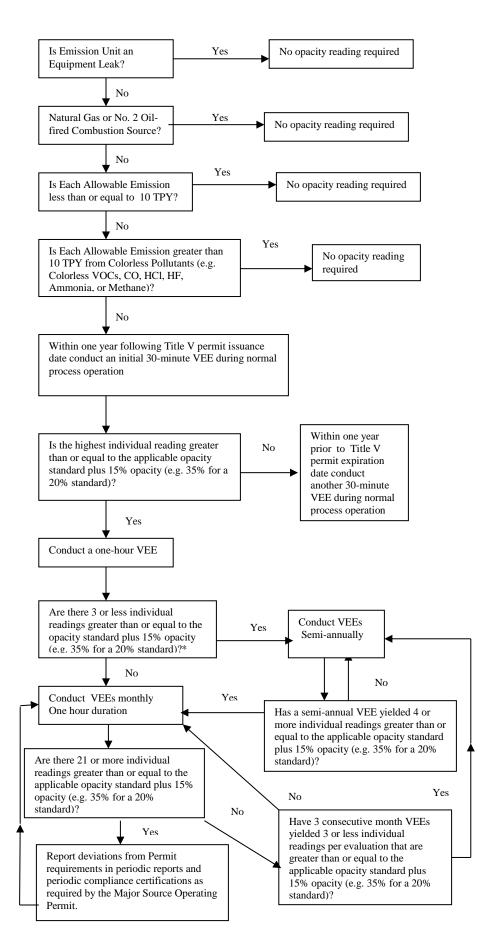
Reader Error

TVEE Method 2: The TAPCD declares non-compliance when 21 observations are read at the standard plus 15% opacity (e.g. 35% for a 20% standard).

*The rationale for this is the fact that Rule 1200-03-05-.01 allows for an exemption of 5 minutes (20 readings) per hour and up to 20 minutes (80 readings) per day. With 4 or more excessive individual readings per hour the possibility of a daily exceedance exists.

Note: A company could mutually agree to have all of its sources regulated by EPA Method 9. Caution: Agreement to use Method 9 could potentially place some sources in non-compliance with visible emission standards. Please be sure before you agree.

Dated June 18, 1996 Amended September 11, 2013



ATTACHMENT 2

OPACITY MATRIX DECISION TREE for VISIBLE EMISSION EVALUATION METHOD 9

dated JUNE 18, 1996 and amended September 11, 2013

Decision Tree PM for Opacity for Sources Utilizing EPA Method 9*

Notes:

PM = Periodic Monitoring required by 1200-03-09-.02(11)(e)(iii).

This Decision Tree outlines the criteria by which major sources can meet the periodic monitoring and testing requirements of Title V for demonstrating compliance with the visible emission standards set forth in the permit. It is not intended to determine compliance requirements for EPA's Compliance Assurance Monitoring (CAM) Rule (formerly referred to as Enhanced Monitoring – Proposed 40 CFR 64).

Examine each emission unit using this Decision Tree to determine the PM required.*

Use of continuous emission monitoring systems eliminates the need to do any additional periodic monitoring.

Visible Emission Evaluations (VEEs) are to be conducted utilizing EPA Method 9. The observer must be properly certified to conduct valid evaluations.

Typical Pollutants Particulates, VOC, CO, SO₂, NO_x, HCl, HF, HBr, Ammonia, and Methane.

Initial observations are to be repeated within 90 days of startup of a modified source, if a new construction permit is issued for modification of the source.

A VEE conducted by TAPCD personnel after the Title V permit is issued will also constitute an initial reading.

Reader Error

EPA Method 9, Non-NSPS or NESHAPS stipulated opacity standards: The TAPCD guidance is to declares noncompliance when the highest six-minute average** exceeds the standard plus 6.8% opacity (e.g. 26.8% for a 20% standard).

EPA Method 9, NSPS or NESHAPS stipulate opacity standards: EPA guidance is to allow only engineering round. No allowance for reader error is given.

- *Not applicable to Asbestos manufacturing subject to 40 CFR 61.142
- **Or second highest six-minute average, if the source has an exemption period stipulated in either the regulations or in the permit.

Dated June 18, 1996 Amended September 11, 2013

